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ABSTRACT

This catalog contains descriptive information on 660 products funded, in whole or in part, by the National Institute of Education (NIE). Purpose of the catalog is (1) to inform educational practitioners, developers, policy-makers, and publishers about a wide range of educational products and (2) to help potential consumers select the most appropriate educational products for their needs. Included are NIE-sponsored products that have been published commercially, as well as those available through noncommercial sources. Approximately two-thirds of the products require no training or technical assistance; in many cases any necessary assistance is available from the product's developers or publishers. The product descriptions are organized into 12 major subject areas, including (1) aesthetic education, (2) basic skills, (3) early childhood education, (4) education and work, (5) educational equity, (6) evaluation, measurement, and needs assessment, (7) finance, productivity, and management, (8) guidance and counseling, (9) information utilization and dissemination, (10) postsecondary education, (11) social education/social science, and (12) teacher education. Six separate indexes list the products by subject, intended user, developer/author, geographic location of developer/author, media, and catalog page number. (Author/JG)

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Catalog of NIE Education Products

1975

Volume 1 of 2

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
David Mathews, *Secretary*
Virginia Y. Trotter, *Assistant Secretary for Education*

National Institute of Education
Harold L. Hodgkinson, *Director*
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EA 008 569

FOREWORD

More than 3 years ago, Congress created the National Institute of Education (NIE) with the mandate to improve American education through research, development, and dissemination activities. *The Catalog of NIE Education Products,* the first of its kind published by NIE, represents the accumulated knowledge of educational researchers and others in the form of education products for use in the Nation's schools, developed at a cost in excess of $100 million.

The *Catalog* was designed to serve a number of audiences. It provides educators at all levels of education with a ready and comprehensive source of information on new tools and methods for improving and facilitating the teaching and learning processes. Members of Congress will be interested in the many quality educational products developed with Federal research and development funds. Parents can become informed on new approaches and diverse methods for educating their children. And publishers can be apprised of the latest products available for publishing and marketing to the education community. However, it is the students of the country who we hope will be the primary beneficiaries of the efforts that went into the development of these products.

NIE is indebted to the many developers and authors who contributed not only the products described in the *Catalog* but also the *Catalog* information about them.

The Institute thus presents this *Catalog* as evidence of progress toward fulfilling its mission and mandate from Congress.

Senta A. Raizen
Senta A. Raizen
Associate Director
for Dissemination
and Resources

Harold L. Hodgkinson
Harold L. Hodgkinson
Director

ACKNOWLEDGMENTS

NIE wishes to acknowledge the contributions of the many persons who were involved in the development of this *Catalog*. At the risk of overlooking some, the Institute expresses its special thanks to its contractors and grantees, especially the educational laboratories and centers and ERIC Clearinghouses, who responded so ably and promptly to our request for information on their products. The contractor TEAM Associates, Inc. is credited with having contributed significantly to the design and production of the *Catalog*. Finally, the Institute acknowledges the generous contributions of time and effort by staff within the various NIE units, and especially those in the Dissemination and Resources Group responsible for the *Catalog*.

C. Larry Hutchins, *Chief*
School Practice and Service
Division

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INTRODUCTION

This is the first *Catalog of NIE Education Products.* It contains descriptive information on 660 products funded, in whole or in part, by the National Institute of Education. The primary purposes of the *Catalog* are twofold: (1) To inform educational practitioners, developers, policymakers, and publishers about a wide range of school-oriented products developed with Federal R&D funds and (2) to provide information to help potential consumers make decisions concerning the most appropriate education products for their needs.

Development of the Catalog

In February 1975 NIE requested all its past and current contractors and grantees to provide information on each product—defined as any tangible outcome from a project which could be used to improve or facilitate the teaching and learning processes—which would be ready for implementation by November 30, 1975. In the guidelines for the preparation of these entries, NIE asked developers to include "limitations, provisos, and unknowns as well as positive information" and to make "assurances and claims" about their products, which they were expected to be able to support with credible evidence. Assurances were to be made that the product, when used as directed, would not affect users negatively, would not perpetuate social biases (such as sexism and racism), and was indeed replicable or transportable. If developers could not make these assurances, they were to specify the negative attributes and, where appropriate, suggest how users could protect themselves against potential hazards. This request for assurances was made in the tradition of Government protection of safety of the individual and fair and equal treatment of all citizens.

In the claims section of each product entry, developers were encouraged to make supportable assertions about the positive attributes of their products. These claims (related to product effectiveness, cost advantages, uniqueness, etc.) extend beyond the minimal assurances with respect to safety, transportability, and social fairness of the product.

Catalog users should note that, because of time and staff constraints, NIE did not verify the product descriptions submitted by the developers. All descriptions were included if they had been received by a specified date and if they addressed the informational elements requested in the guidelines. Thus NIE cannot certify the accuracy, completeness, or objectivity of the developers' statements. There are many other NIE products still in the developmental and testing stages which are not included in this first *Catalog*, and there are no doubt others which were inadvertently omitted. If this *Catalog* is judged useful by consumers, future editions are anticipated that will include additional products and updated information on those in this edition.

Summary Analysis of Catalog Products

The 660 products described in this *Catalog* were developed at a cost of over $100 million. The majority are from the federally sponsored educational laboratories and university-based research and development centers established a decade ago. The remainder were produced by the Educational Resources Information Center (ERIC) Clearinghouses and other developers.

The developers claim that approximately half of these products have undergone small-scale controlled tests of effectiveness, and about half have been revised. One-third claim large-scale replications in a number of sites to confirm that the products are effective, can be used with little difficulty, and work in a variety of settings. These percentages are particularly impressive when one examines information on evaluations of other educational products. For example, testimony before the Select Subcommittee on Education of the Committee on Education and Labor, House of Representatives, in 1971, revealed that only 1 percent of the 400,000 education products currently available have been improved, based on data gathered from the prime users (usually students).

The 13 subject area categories of the 660 products range from aesthetic education for elementary school students to postsecondary education, with a strong emphasis on basic skills, education and work, and educational equity. The costs of the products, indicative of their size and complexity, range from 35 cents for an early childhood mathematics brochure to several hundred dollars for a multimedia set of mathematics materials spanning several grades and classrooms. Approximately two-thirds of the products appear to require no training or technical assistance for their use. In many cases where this training or assistance is needed or desired, it is available from the developers or publishers.

The *Catalog* includes NIE-sponsored products which have been published commercially as well as those which are available from noncommercial sources. Those available from noncommercial sources are usually products intended for a restricted audience for which commercial publishers are unwilling to commit resources. Although all the products in the *Catalog* were scheduled to have been completed by November 30, 1975, distribution arrangements may not have been made in every case. Information on the availability of products may be obtained from the sources identified in the *Catalog.*

Product Selection Criteria

How should one go about selecting an educational product, either from the *Catalog* or another source? In developing guidelines for the product descriptions, NIE tried to anticipate consumer needs for descriptive and analytical summary information to make product screening decisions easier. The items in the *Catalog* descriptions were thus designed to help consumers judge the adequacy of the product according to some general selection criteria.

Before selecting an educational product, a potential consumer might consider the following criteria:

- *Need*–Does the product appear to focus on your needs and desires? Does it address the subject area, goals, and intended users which you have identified as needing help? Does the product conform to your instructional style and your students' learning style? Does it address your desired values?
- *Practicability and availability*–Does the product appear to be practical or useful for you? Will it be available when you need it? Is it sufficiently well documented so that you know what you will be selecting? If auxiliary services, equipment, expertise, or training are needed to use the product as prescribed, will you be able to attain them?
- *Costs* (including initial and continuation costs for materials, equipment, space, time, and personnel)–Can you afford the product? Will the product be used by enough students, enough times to warrant its purchase or rental? Can sharing arrangements reduce high costs?
- *Ease of use*–Is it reasonably easy to implement and maintain quality use of the product? Is it likely to fit in with your organization's constraints? Is it comprehensive or supplementary? Can it be used in part? Can the product be adapted to fit your special needs or constraints?
- *Acceptability to users*–Are teachers, students, administrators, and community members likely to be opposed to this product? Is there likely to be a self-sustaining interest in continuing the product use?
- *Intrinsic quality*–Does the product appear to have sufficiently high intrinsic quality to be worthy of selection? Are the assurances of social fairness (sex, race, age, etc.) adequate for your users? Are the contents sufficiently accurate and up-to-date for the intended users? Does the instructional design meet your standards for quality on use of motivational techniques, statement of objectives, orientation and evaluation components, appropriate sequencing and pacing, etc.? Is the technical quality relating to clarity, intelligibility, or durability of audio, video, print, manipulable, or computer materials acceptable?
- *Product appeal*–Does the product appeal to reviewers? Are the materials creative, artistic, unique? Do users and reviewers indicate that they like the product?
- *Careful product development*–Does it appear that the product was well or carefully made? Was the rationale convincing? Was there a needs assessment or task analysis prior to development? Was the product revised based on feedback from learners, users, and other expert reviewers? Were the developers qualified in development techniques as well as the content area covered?
- *Effectiveness*–Is the product effective in promoting desirable changes? Will it help promote changes which you need or want, skill or performance changes, gains in knowledge, awareness, changes in attitudes? Are these changes sufficiently large and durable? Are there positive byproducts associated with these changes, such as the ability to achieve gains in a shorter time than usual? Will the product cause harm or contribute to changes which may be detrimental? Does the product create or stimulate latent or existing problems?

Prior to making final judgements based on the above criteria, a potential consumer might also want to check the quality of the evidence supporting the developer's claims and make comparisons with other products.

- *Quality of evidence*–Do you suspect that important evidence was omitted? Was the evidence relevant? Were the indicators or instruments reliable and valid? Was the evidence and the way it was collected and reported objective? Does the evidence present a convincing case that the effects caused by or attributed to the product were the result of the product's use, or could they be attributed to other effects, such as the regular education process or normal maturation? Will the product be just as effective in other appropriate situations? Were the samples of product effects examined with sufficient numbers and types of users in typical user locations?
- *Comparisons*–It may also be helpful to compare one product to another or to common alternatives based on multiple criteria. For example, is product X better than your currently used product based on "ease of use," "social fairness," "effectiveness," etc.?

Consumers should remember that the above criteria and appraisal dimensions are just a sample of many that might be used for screening or final selection decisions. They should be prioritized according to one's own needs and desires. In most cases the brief, summary product descriptions in the *Catalog* will be useful primarily for selecting a small group of product alternatives, which then should be reviewed in depth before a final selection decision is made.

Other Sources of Product Information

There are a number of other sources of information on educational products and programs available. Space limitation prevents a complete listing here, but two sources sponsored by the Division of Education, HEW, are:

- Educational Resources Information Center (ERIC), National Institute of Education, Washington, D.C. 20208

  ERIC is a national computerized educational information system which collects, processes, and makes available a wide range of educational documents. NIE will encourage developers of products in the *Catalog* to prepare backup, additional detailed information on these products for inclusion in ERIC. Such information would be summaries of evidence to support the assurances and claims, field test or evaluation reports, development/revision reports, case studies describing how the products were used by specific groups, and lists of user sites. Also included in ERIC are a number of State catalogs of effective programs and practices operating in local schools.

- Joint Dissemination Review Panel (JDRP), Office of Education, Washington, D.C. 20202

  The JDRP, a joint NIE-OE panel, was established to review and judge Division of Education programs and products on evidence of effectiveness. Brief descriptions, including information on program characteristics and adoption criteria, of over 100 programs approved as of July 1975 appear in a publication entitled *Educational Programs That Work*, copies of which are available from NDN Catalog Order Department, Far West Laboratory for Educational Research and Development, 1855 Folsom, San Francisco, California 94103, at $4.95 each.

Catalog User Guidelines

Both the guidelines for product description entries and the *Catalog* itself are designed to facilitate access to the information on educational products contained within these covers. The *Catalog* is divided into 12 major subject areas, three of which have been further subdivided: Basic Skills, Education and Work, and Educational Equity. In each of these areas, subheadings are treated as separate subject areas in themselves so that there are 22 separate subject areas throughout the two volumes of the *Catalog*.

The *Catalog* includes a subject overview—a broad state of the art review—for each of the fields addressed. Each overview was prepared by a distinguished practitioner/researcher or NIE program specialist chosen for his or her familiarity with the area under review. In most cases NIE program specialists reviewed the overview and added additional information regarding NIE-sponsored products relevant to the field. The resulting overviews serve as introductions to the subject areas of the *Catalog*. The Institute does not necessarily endorse the views expressed in these overviews, nor should Institute policy be inferred from authors' suggestions for future research and development activities.

The guidelines developed for product descriptions were designed with the educational practitioner, as potential consumer, in mind. All product descriptions conform to a standardized format to provide uniformity of access to product information. Product descriptions were edited *only* for Government Printing Office style and conformity to the suggested product description guidelines. Developers were encouraged to include photographs and line drawings to supplement the narrative descriptions. They submitted information under the following standardized headings:

- NIE Product Title
- Developer/Author
- Narrative Description of Product
- Subject Area(s)
- Intended Users and Beneficiaries
- Goal(s) or Purpose(s) (learning outcomes)
- Patterns of Use
- Assessment Provisions
- Time Requirements
- Implementation Procedures
- Materials and Equipment
- Assurances and Claims
- Availability

Individual products within each subject area are generally sequenced by type according to the following categorizations:

- Curriculum
  - . . Student type
  - . . Computer assisted
  - . . Self-instructional
- Measurement and Assessment
- Management
- Training
- Resources

There are cases, however, where individual products could be classified in more than one category; they are sequenced according to editorial discretion. In other cases, descriptions of products comprising a comprehensive curriculum package are grouped together.

There are six indexes located at the end of volume 2 which provide easy access to product information. These indexes categorize the 66 products by:

- Subject
- User[1]
- Developer/Author
- Geographic Location of Authors/Developers
- Media
- Product Page

Products in the first five indexes are indexed by a six-digit RD number which was assigned to each product description numerically within a subject category. Within each index the RD number is displayed at the end of and immediately below the product title. It relates to the RD number of a product description which appears in the upper left- and right-hand corners of facing pages in the *Catalog*, beneath the subject heading. The Media Index differs slightly in format in that it presents product information in chart form. The last index—the Product Page Index—lists products, under subject categories, by page numbers. This arrangement, therefore, offers *Catalog* users easy reference to individual product descriptions through either RD- or page-referenced numbers.

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[1] For the index a "user" is defined as either the target recipient or implementer of a product. Products in this index are listed multiply in each applicable user category. Separate user categories are listed in the index introduction.

The following chart shows the subject areas in the *Catalog* by volume number, RD number range, and page range:

VOLUME 1

SUBJECT AREA	RD NO. RANGE	PAGE RANGE
Aesthetic Education	010 001-010 044	11 to 138
Basic Skills		
Mathematics and Science	020 001-020 039	145 to 249
Reading and Language Arts	030 001-030 041	253 to 357
Reasoning and Problem Solving	040 001-040 018	363 to 407
Early Childhood Education	050 001-050 069	415 to 550
Education and Work (Career Education)		
Administration and Staff Development	060 001-060 029	559 to 611
Career Awareness and Exploration	070 001-070 027	613 to 667
Career Counseling	080 001-080 032	669 to 733
Work Experience-Based Programs	090 001-090 010	735 to 760

VOLUME 2

SUBJECT AREA	RD NO. RANGE	PAGE RANGE
Educational Equity		
Handicapped	100 001-100 014	765 to 783
Multicultural Bilingual	110 001-110 059	787 to 939
Sex Fairness	120 001-120 009	943 to 959
Evaluation, Measurement and Needs Assessment	130 001-130 044	967 to 1056
Finance, Productivity and Management	140 001-140 053	1061 to 1174
Guidance and Counseling	150 001-150 011	1179 to 1190
Information Utilization and Dissemination	160 001-160 024	1195 to 1240
Postsecondary Education	170 001-170 031	1247 to 1292
Social Education	180 001-180 021	1301 to 1346
Social Science	190 001-190 017	1347 to 1365
Teacher Education	200 001-200 068	1373 to 1476

AESTHETIC
EDUCATION

OVERVIEW

MARTIN ENGEL
National Institute of Education
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There is a quiet revolution going on in education which is expanding the artistic and aesthetic character and content of basic education. Until recently, most Americans experienced art in their education as a peripheral and isolated activity. Intellectually, the schools have regarded the arts as entertaining rather than as fundamental to human understanding. However, basic changes in this attitude are now being effected.

Historically, the arts enjoyed a brief flowering in the schools during the 1930's, when progressive education emphasized individual, creative, and expressive behavior. World War II and the Sputnik era restored the narrow view of the academic disciplines. The recent advocacy of an enhanced "quality of life" for every American alluded only to economic and material quality, not aesthetic quality. During the 1960's, however, the arts again began to catch the attention of the education community, in conjunction with developmental psychology and humanization of education generally that is, with social and personal, as well as aesthetic growth. In other words, education refocused its sights upon the development of the whole person, not only academic skills. It is this renaissance which, in the characteristic time lag of the cultural shift within the schools, is only now beginning to permeate the education community.

The teaching of the arts in the schools

Until the last decade, the creative and artistic efforts of most children were encouraged and rewarded until they reached a certain age. Early in their schooling, when it was time to "get serious," the adult world then began demanding preparation for job and work, and an end to play and fun. Home and school, which had encouraged art and other creative production, reversed their emphasis. The importance of the body was replaced with the importance of the "mind" or head. Henceforth, perhaps around the first or second grade, artistic and idiosyncratic expression came to be regarded as detrimental to the development of behaviors appropriate to adult life. From that time on in the educational life of every youngster, the curriculum relegated the arts to a peripheral role, such as the art or music teacher visiting once a week.

Nevertheless, the arts are being taught in the schools, and the profession has been organized for some time. About 98 percent of all junior high schools and 90 percent of all senior high schools offer some activity in the field of music, such as a weekly class period, participation in the orchestra, or instrument instruction. However, only 14 percent of all junior and senior high schools require any music for graduation. Thus, while the arts, in one form or another, have indeed been offered as educational experiences in the schools, that experience until now has simply not been taken seriously. More importantly, this indicates that, while the visual arts and music are available, only enough is available for a small percentage of the student population. It is probable that when students demand more art, it will not be available, and student demand will reflect, if not exceed, the changing demands of society. The arts have been the sole "affective" component of the curriculum, and the affective domain has rarely been agreed upon as an important responsibility of the schools. But times are changing. The direction of their change is the topic of this overview.

Dr. Martin Engel is the Special Adviser for the Arts and Humanities at the National Institute of Education, Washington, D.C.

Arts and Aesthetic Education

The basic terminology of aesthetic education includes a number of frequently used and confused terms and phrases which need to be defined. Art or the arts includes the visual arts, such as two-dimensional art (e.g., painting and graphics) and three-dimensional art (e.g., sculpture and ceramics); architecture; music; dance; literature; drama and theater; and film. Art education has traditionally referred to courses and educational programs only in the visual arts, as distinct from music education. Emphasis has been upon "artsy-craftsy" manipulation of materials—that is, the technology of production, or "how-to," rather than upon aesthetic or qualitative perception and judgment of works of art. Arts education or education in the arts has attempted to integrate the several art media and espoused interdisciplinary classroom content, meeting with resistance from the specialist teachers in the various media. The stronger theoretical/conceptual basis for curriculums is still centered upon traditional art media, rather than upon aesthetic perception which ranges far beyond the arts. Aesthetic education, a generic term, incorporates all of the arts as the most concentrated form of aesthetic expression and perception within a single philosophic system. Stress is upon the teaching of the arts from an experiential basis rather than a production-oriented method.

One of the most pervasive problems, apparent in this list of terms, is the isolation of the arts, one from the other, as well as the arts from other disciplines. Also, the various representatives of the different arts are vying for territorial dominance in the battle of methodologies as well as content, all within the educational setting. The visual arts professionals have, until very recently, ignored the music educators, and vice versa, or have fought them over crumbs of the school budget. The teachers of performance and craftsmanship have regarded with contempt the theoreticians and teachers who stress perceptual experience. The emergence of the concepts of arts education and aesthetic education indicates that the several arts are coming together, both conceptually and operationally, within coordinated educational programs and that a balance is being struck among performance, appreciation, and knowledge.

The Federal role

One of the earliest efforts to research and develop the teaching of the arts in the schools emerged in 1965 with the establishment of the Arts and Humanities Program within the U.S. Office of Education's (USOE) Bureau of Research. The Government thereby made an introductory commitment to the importance of the arts in the schools. Federal support for research and development in the arts provided a legitimacy for art educators previously accorded only to the sciences and science education.

The second most influential role that the Federal Government played in implementing a renewed interest in art education was the inclusion of titles I and III in the 1965 Elementary and Secondary Education Act (ESEA). Funds were channeled directly to the local school systems for special programs for disadvantaged students. However, rather than systematic educational efforts, these programs consisted of isolated exposure to performances and one-time, out-of-school "cultural" trips. The 1970 evaluation of title I indicated that such random exposure had little lasting educational value, and subsequently all arts activities were sharply reduced, thereby eliminating even the few effective ones.

By 1970, Federal support for the arts in the schools had diminished. Other priorities displaced the arts within the constraints of shrinking budgets and rising costs. This brief summary of the Federal role is by no means complete, however. Some Government watchers believe that the U.S. Office of Education Arts and Humanities Program was established only as an interim program, anticipating the creation of the National Endowment for the Arts and the National Endowment for the Humanities in 1965. As the two endowments began to stand on their own feet, funding for the Arts and Humanities Program in USOE diminished and finally, in 1970, disappeared. The point of this is that the two national endowments, free of any educational research and development obligations, excluded any systematic commitment to art education in the schools. The Endowment for the Humanities stresses postsecondary curriculums in its education division, while the Endowment for the Arts targets its resources on the performing arts, art practice outside the schools, and support for artists who "visit" and work in the schools for limited periods of time.

With certain exceptions, the Federal commitment to art education has fallen between two chairs. The Office of Education came to assume that the arts were now the business of the endowments, while the endowments were reluctant to infringe upon the educational territory which properly belonged to the Office of Education.

Between 1969 and 1972, a large amount of money was transferred to the two endowments. The Arts Endowment put the funds into a program called "Arts in Schools." Through the administration of the States' arts councils, this massive program supports the employment of practicing professionals in all the arts to spend from a few weeks to an entire school year as artists-in-residence in a school. Recently (1974) the Emergency School Aid Act of the Office of Education has awarded $1 million to arts activities in a number of States to be applied to education. Unfortunately, these massive educational experiments do not provide a systematic rationale or pedagogical design for a sustained program of aesthetic education.

The National Institute of Education role

In 1972, the National Institute of Education inherited the curriculum development programs of the educational laboratories and centers from the Bureau of Research of the Office of Education. Among these was the Aesthetic Education Program developed at CEMREL (formerly the Central Midwestern Region Educational Laboratory), a regional educational laboratory in St. Louis, Missouri.

Launched in the spirit of the massive curriculum development projects in the sciences during the 1960's, this new curriculum in aesthetic education is intended for kindergarten through seventh grade, and general classroom rather than the once-a-week arts specialist activity. It stresses aesthetic perception in all facets of human experience, especially the arts, rather than only manual dexterity, or crafts-skills, or historical knowledge in any one medium. Committed to the learning-by-doing pedagogy, the developers borrowed from the educational philosophy of Piaget, and the aesthetic education theories of Lowenfeld and Herbert Read, and the ideas of Broudy, Barkan, and others.

This program includes a variety of materials. For example, the program *Aesthetics in the Physical World*, for kindergarten and first grade, provides instructional packages to serve as an introduction to the fundamental elements of perception, such as light, sound, and motion. Fundamentals underlying aesthetic phenomena are explored in activities which encourage students to become involved in such activities as creating their own spaces or examining the function of light and vision by experiencing them in playground games. Packages in this group provide an introduction to and a unification of the aesthetic dimension of the arts in the environment. The *Aesthetic and Art Elements* packages encourage students to recognize elements of aesthetic phenomena, such as textures in music, shape in the visual arts, and movement in the environment. Students using this group of packages learn to identify elements in the examples presented and to recognize them as a part of the arts, and relate them to the structure of a work of art. The *Aesthetic and Creative Process* packages emphasize students taking elements of the arts and the environment and creatively transforming them into a whole work. Creating a characterization, constructing a dramatic plot, relating sounds and movement, creating word pictures–these are among the activities in which the students originate their own ideas and make their own structures for the creative process.

Other materials include the *Aesthetics and the Artists* packages which explore several questions: Who are the people that make works of art? Why do they do it? Where do they get their ideas? Students see how the artist takes an idea, works with art elements, and organizes them into objects and performances. The student also creates his or her own art works, participating in activities which are analogous to processes the artist uses. The *Aesthetics and the Culture* materials promote student exploration of the relationships between aesthetics and culture. Each package provides a unique point of view which will increase the student's understanding of the aesthetic elements utilized by various cultures. Through a series of activities, students are encouraged to form ideas on the human creative expressions; on how those expressions are generated by individuals and groups and shaped by their interaction with the culture; and on how aesthetic values and forms are similar or different in various cultures for a variety of reasons. Since aesthetics play a major role in the affective quality of the environment, the materials *Aesthetics and the Environment* permit students to understand the effects of technology on the environment, examine personal interactive modes in public spaces of today, imagine future environments, and consider the interrelatedness of functional and aesthetic concerns.

In addition to these curriculum packages, CEMREL is developing curriculums for both preservice and inservice teacher training, as well as a series of sites - teacher centers or learning centers - which serve as focuses for aesthetic education training for teachers, information and instructional resources that are themselves examples of an aesthetic environment. The intent is not only to create content packages, but also to assure their effective utilization within the general classroom setting.

Also within the domain of elementary school curriculum development, the Southwest Regional Education Laboratory (SWRL) of Los Alamitos, California, is developing two major curriculum packages in art and music:

1. The SWRL Art Program is designed to provide an alternative to the teaching practices common in many elementary classrooms (K through 6). The curriculum provides a holistic approach introducing the various skills and perspectives of the artist, critic, and art historian to the student.
2. The SWRL Music Program enables pupils to develop their musical skills and appreciation in a variety of learning situations. Teachers with little or no music experience are able to conduct all program activities.

NIE is also continuing support for a basic research program that was launched originally with funds from the Arts and Humanities Program in 1970. *Project Zero*, at the Harvard Graduate School of Education, focuses upon a rigorous and systematic effort to ascertain the nature of the creative art process during the actual making of a work of art, either poem or picture. The effort seeks to yield a knowledge base from which a pedagogical theory can be constructed, predicated upon the premise that creative skills can be taught and learned.

NIE has committed itself to supporting a relatively comprehensive program in arts and aesthetic education. Basic research is being done at Indiana University and Harvard University. Curriculum development is being conducted at two regional laboratories (SWRL and CEMREL) for well over one million dollars each year. CEMREL is conducting massive preservice and inservice training programs in aesthetic education for teachers. Many of CEMREL's packages are being published and distributed by a commercial publisher. The Career Education Division of NIE has also supported research and curriculum development in the arts as one of a number of careers through a consortium of Ohio State University and local school systems.

A broader role for the arts

In spite of growing demand, the "arts" are still not the real business of the schools. The problem is twofold: Extrinsically, the arts and aesthetic experiences are devaluated in a culture that is vitalized by materialistic, economic, technocratic, and bureaucratic values. Intrinsically, art education lacks a comprehensive knowledge and theory base, a generally acceptable pedagogy, and suffers from vague, confused, and unclear goals.

However, the importance of aesthetic education has been widely discussed. E. Paul Torrance, one of the leading educational scholars of creativity (e.g., the Torrance Test of Creative Thinking, 1966), has studied the characteristics of gifted children outside the middle-class, dominant culture population—that is, among disadvantaged, minority, and ethnically different children. His search led him to believe that a definition of the talented and gifted was too narrow. His thesis was to no longer insist on identifying and cultivating only those kinds of talent that the dominant affluent culture values. On the basis of his research, Torrance concluded that certain characteristics for successful educational intervention with the disadvantaged and culturally diverse are essential, including the use of the arts in supplying motivation and as a medium for developing important skills, concepts, and subject matter competencies (*Teacher Record*, May 1974, p. 471).

Torrance's work seems to confirm the work of Alfredo Castaneda of Stanford who has demonstrated that the culturally diverse perceive and construct their reality in rather different ways. He contends that the ethnically different, such as Mexican Americans or inner-city blacks, perceive their world in nondiscrete, nonlinear, nonabstract ways. Rather, their personal paradigm is integral pictographic, dramatic, humane, personalized, context dependent, and highly charged with emotion and fantasy. Although it is possible to overstate this dichotomy, nonetheless both Torrance and Castaneda make telling arguments for a far more extensive research development program through the vehicle of the arts and aesthetic perception in an educational context.

The need for research and development

The number of problems available to those wishing to implement effective aesthetic education experiences in the public schools is nearly limitless. From basic research, theory, and knowledge building on the one hand, to implementation and evaluation of ongoing activities on the other hand, every step is a pioneering one. There does not yet exist a theory of learning and development in the aesthetic domain paralleling Piaget's intellectual-development theories.

The need for research and development can be summarized by citing the following major categories as they might apply to education in the arts and aesthetic education:

1. Learning processes—How does the individual learn aesthetic perception? How does one learn to create, to intuit, and to imagine? How does one measure such learning?
2. Content and curriculum—What is the most appropriate content for education in the arts and for aesthetic education? How does one distinguish among various student groups, considering age, socioeconomic, and ethnic/cultural variables?

   How much content should be aimed at the "head" and how much at the "hands"? Should all the arts constitute the curriculum including manipulative skills in all the arts, or can the student be expected to generalize from an intimate working experience in only one medium? Should interdisciplinary approaches with the concomitant risk of superficiality replace the individual art disciplines, with their parochial limitations? Should aesthetic education be equal to, in emphasis and importance, mathematical/logical thinking *and* verbal-arts training? Should arts and aesthetic content be prepackaged, as are other curriculums in the sciences, reading, and mathematics, or is that a contradiction in terms? How can the effectiveness of curriculum in aesthetic education be measured apart from its delivery?
3. Teacher training—Is good taste, a sense of beauty, sensitivity, and connoisseurship learnable, or is it an inborn trait? If it is learnable, is it teachable? If teachable, can teachers be taught to teach it? If it is learnable, and teachable, and if teachers can be taught to teach it, then how can teachers be motivated and prepared to teach such subjective and expressive disciplines? What is effective teaching of creativity and aesthetic perception? Is aesthetic perception and creativity necessary to teach it?

Finally, and most practically, how does aesthetic education penetrate the school? How will it be financed in the face of declining school populations, increased vocationalism, and shrinking budgets? What is the administrator's role? It is not that research must be expected to generate definitive answers to these questions. Rather, the debates, disagreements, and premises for educational practice ought simply to be much better informed than they are now. The language of theory in the arts and aesthetic education ought to become more precise, clear, and meaningful. In order to pursue such research and development, it is necessary to create information networks to create locales and pools of intense commitment and effort, and to seek out schools and school systems where the "ground is already fertile."

INTRODUCTION TO LIGHT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package to introduce kindergarten and primary grade students to light as a basic phenomenon

One of Aesthetics in the Physical World Series of *Five Sense Store* packages, this package introduces students to light as a basic phenomenon in the environment, one which can contribute to aesthetic experiences either naturally or through the expression of an artist. The purpose of *Introduction to Light* is to introduce kindergarten and primary grade students to both natural and artificial light as a phenomenon which engages them to see. The students will learn about the physical properties of light—intensity, direction, and color—and how these properties affect the appearance of things and personal feelings about them. Various experiences will acquaint them with the relationships between light and seeing, hearing and touching. The phenomenon of shadow will also be investigated. The students will [illegible] light and shadow can be used to communicate ideas and feelings. They will find, too, that light with its properties has aesthetic potential—it affects our emotions and artists use it in their work. Finally, *Introduction to Light* provides students with opportunities to use light creatively in exploring this aesthetic potential.

Sample Lesson

(Addressed to Teachers)

Lesson 12: Creating a Light Environment

General Description: Students work with basic properties of light in creating an environment of their own choosing.

Procedure: Explain to the students what is going to happen. Discuss with them the fact that all of you together are going to create a house or a place with cardboard boxes, and that it will be a house that uses light to make it interesting.

Get one of your largest boxes and show it to the students. Place it with the open side down in front of them. Ask them to imagine how it must look inside at this moment—light? dark? how dark? scary? happy? Now suggest to them that each box is going to be like a room in a house. Ask what should be done to get light into the rooms. (Cut windows and doors.)

"If we want a little light, how many windows should we make? How big should they be?"

"What if we want a lot of light?"

"What if we wanted to feel scary? happy?"

Depending on the number and age of your students, assign one box to two or more students. Provide them with a crayon or marker to indicate where windows will go and give each group or child a specific assignment:

"Will you make a room that is very bright and happy?"

"Would you make one that has light coming in from only one side?"

"And you, one that has light coming from three sides?"

"And you, one that has only red and blue light coming in?"

Let the students work at marking where each opening will go. Then if they are very young you will have to make the openings for them in order to avoid accidents.

As your students are working, point out that people who design real buildings—architects—think about the amount of light needed in those buildings, just as they are doing. For example, architects know it's nice to have a kitchen that's sunlit and cheery; so they will try to put as many windows as possible in a kitchen that they design. On the other hand, architects also know that a movie theater can have no outside light; so they try to design a windowless building that can be lit by artificial light alone and still seem pleasant.

You might want to join some of the boxes together by making doors, and keep others separate to specify different light conditions. Students may wish to decorate their boxes on the outside with paints and on the inside with things they like or that might go with the particular lighting involved. Consider leaving this environment in your classroom for some time and using it as a place students may use for quiet activities or for reading (in the well-lit ones).

RD 010 001

SUBJECT AREA(S)

The subject area is Aesthetics in the Physical World; visual arts and explores light as a natural and artificial phenomenon; the physical properties of light—intensity, direction, and color; how these properties affect the appearance of things and the way people feel about them; the phenomenon of shadow; communicative and creative potential of light and shadow.

INTENDED USERS AND BENEFICIARIES

Introduction to Light was designed for and formally tested with kindergarten and 1st-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students: (1) To become aware of light as both a natural and an artificial phenomenon which enables them to see, (2) to learn that light has certain basic properties which affect the appearance of things, (3) to learn that light and shadow can be used to communicate ideas and feelings, and (4) to become aware that light has aesthetic potential.

PATTERNS OF USE

Introduction to Light is a self-contained instructional package. It may be used as part of an ongoing curriculum in art; and linked with other AEP units which deal with sound, space, and motion and which are clustered around "Aesthetics in the Physical World."

ASSESSMENT PROVISIONS

Learning is assessed by the teacher. Guidelines for evaluating student performance and oral responses are interspersed throughout the teacher's guide.

TIME REQUIREMENTS

The 12 lessons in this package require 7 to 8 hours to complete. The lessons take varying amounts of time from 20 minutes to 1 hour.

IMPLEMENTATION PROCEDURES

Introduction to Light does not require a specialist teacher. It is adaptable for use by small groups or a large group of students. A large, clear floor space is needed for several of the activities so that desks will have to be moved around. The teacher's guide outlines all procedures in detail. The materials, now in the final stage of production, will be attractive and durable. Consumables are minimal and are easily purchased from the publisher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops will be offered by the publisher, and curriculum consultation will be available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in three separate classrooms of varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States, using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out ~~an~~ observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early learning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the package on a yearly basis.

The prepublication evaluation of this package was carried out with kindergarten students in three local schools. The majority of the students tested on a performance-oriented student interview were able to do the following tasks: use light to communicate; make use of the expressive potential of shadow; correctly identify that the positioning of the light source was the reason for the differences in appearance of three photographs of the same subject and indicate the probable position of the light source for each; and manipulate one or more of the light properties emphasized in the package (i.e., intensity, direction, and color) to achieve a specific effect. Student and teacher satisfaction with the package ranged from positive to extremely positive as measured by posttreatment questionnaires and interviews.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
Eye masks Colored acetate rectangles Wet acetate Reusable slide mounts	1 set per 6 students	Not determined		
Teacher materials:				
Sound filmstrip Plastic tray Teacher's guide		Not determined		

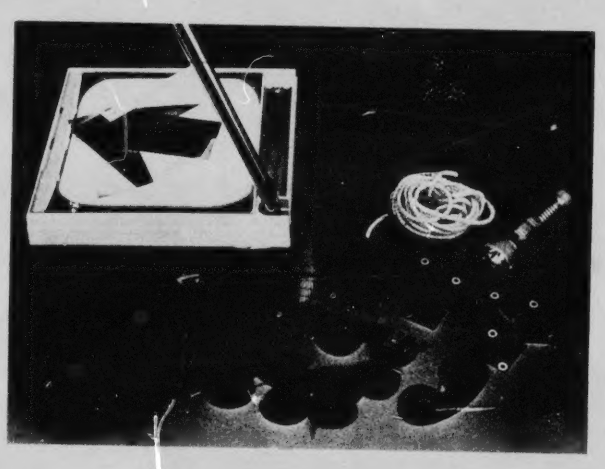
DEVELOPER/AUTHOR:

CEMREL, Inc. (Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene David Michel-Trapaga, Product Developer

AVAILABILITY

Introduction to Light will have a 1975 copyright, and copyright will be claimed until 1981. This package will be available in the fall 1975 from the publisher:
The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 002

INTRODUCTION TO MOTION (PART OF THE AESTHETIC EDUCATION PROGRAM)

A learning package for young children focusing on functional and aesthetic aspects of motion

The Aesthetics in the Physical World series of the Aesthetic Education Program (AEP) includes this instructional package, which deals with motion as a basic phenomenon in the environment. This package focuses on both the functional and the aesthetic aspects of motion. The kindergarten to 1st-grade students work with a slide/tape presentation of these aspects of motion and explore their own bodies to discover potential for movement. The students gain awareness through observation and exploration of movement and through individual ability to use movement functionally and aesthetically. The students also experience works of art—visual art, literature, music, and dance—in which movement is important to the artist's expression of a thought, feeling, or idea. In this way, the students become familiar with how movement may be used aesthetically.

This package encourages students: (1) To investigate their own bodies to see how many ways they can move; (2) to explore their everyday world for moving things, observing how these things move both similarly to and differently from their own bodies; (3) to explore areas more distant than their home and classroom for movement—examine the city and the country and think about how the seasons affect movement; and (4) to experience movement in the subject matter or media of a variety of art works—paintings, musical compositions, and literature.

SUBJECT AREA(S)

The subject area is Aesthetics in the Physical World: Dance, visual art, and sensory perception.

Subject matter includes awareness of the ubiquitous nature of movement in the environment; awareness of the human body's potential for movement; and awareness that movement is used as subject matter and/or through the elements (such as texture, color, rhythm) in the expression of thoughts, feelings, and ideas in works of art.

INTENDED USERS AND BENEFICIARIES

Introduction to Motion, still in the design state, is being prepared for kindergarten and 1st-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to teach students: (1) That movement is a basic phenomenon in their environment and their own bodies; and (2) that movement can be used by artists in their art works to express thoughts, feelings, and ideas.

PATTERNS OF USE

Introduction to Motion will be a self-contained unit of instruction with activities that are cumulative. It may be used as part of an ongoing curriculum in dance, linked with other AEP units which are related to basic phenomena in the physical world and clustered around Aesthetics in the Physical World, and used with science programs.

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

Introduction to Motion is planned to take approximately 10 hours to complete, depending on class size and utilization of suggested "additional activities." Teachers will probably want to devote about 30 minutes per day every day for 2 or 3 days per week to the materials.

IMPLEMENTATION PROCEDURES

Introduction to Motion does not require a specialist teacher. It may be taught in small groups or with a whole class. Students will require a large clear space for moving. The teacher's guide will outline all procedures for the teacher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction.

ASSURANCES AND CLAIMS

Introduction to Motion is presently in development. When completed, it will be tested as defined in the *Basic Program Plan* (CEMREL, 1972). At that time, appropriate assurances and claims will be made.

DEVELOPER/AUTHOR:

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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Gregg Mayer and Susan Ingham, Product Developers

AVAILABILITY

The anticipated completion date of *Introduction to Motion* is November 1975. The package will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 003

INTRODUCTION TO SOUND (PART OF THE AESTHETIC EDUCATION PROGRAM)

Materials for students in kindergarten and the primary grades to help them become aware of sounds in their everyday environment

One of the Aesthetics in the Physical World series of the *Five Sense Store* package, *Introduction to Sound*, helps students in kindergarten and the primary grades realize that sound is a basic phenomenon in the environment and that sound can contribute to aesthetic experiences, either naturally or through the expression of an artist. The students will be introduced to sound as a phenomenon inherent in many objects in their environment. They will find that every sound has a basic quality—literally, the "sound" of the sound—and the characteristic elements of duration, intensity, and pitch (a sound's own ranges of high to low and loud to soft and the length of time it lasts or can be heard). *Introduction to Sound* is intended to bring to the students' attention the multitude of sounds in their everyday surroundings and to make them aware of the potential of these sounds as musical expression.

In this set of materials, students work with imagined and real sounds and have opportunities to organize and manipulate these. In this way, students do much the same thing that a composer does when first imagining how a musical idea will sound when performed by the chosen instruments. Using their voices, as well as genuine sound-producing objects to imitate sounds, students see how they can vary sound by manipulating its elements—duration, intensity, and pitch; how they can organize sounds into different patterns; and how they can perform their compositions. They tape-record some of their work so that they can analyze it for possible change and improvement.

By working with sounds with which they are already familiar and comfortable—a dog's bark, the roar of a car's engine—students begin to understand the possibilities of sound, sound from the farthest reach of the imagination to sound falling within the traditional range of the symphony orchestra. This approach is meant to stimulate an initial confidence in the students about creating with sound, a confidence that can lead them into more complex modes of understanding and expression of this phenomenon. The approach is based on the premise that when individuals use all their senses to create, imagine, or organize sounds, those sounds take on special significance. It is this special significance—a personal meaning—which should reinforce the students' motivation to work with sound and to appreciate others' work with sound.

Sample Lesson

(Addressed to Teachers)

Lesson 3: Changing Sounds by Manipulating Duration, Intensity, and Pitch

Concept: A sound can be altered by manipulating one or more of its basic elements.

General Objective: The students will be able to alter sounds by manipulating duration, intensity, and pitch simultaneously.

Procedure: Discuss the activity with the students in the following manner:

"The last time we worked with this board, we chose these sound cards and we placed element cards underneath them. Today we will continue to choose element cards. But instead of placing one element card under each of the sounds, we will choose one sound and put element cards underneath it until we have one duration card, one intensity card, and one pitch card under that sound."

Explain to the students the following rules for working with element cards:

"You will pick one card for each element and place these under one of the sounds on the board. Only one of each element should be placed under each sound card. If you choose a pitch card but you already have a pitch card, then you will have to put the second one back on the stack. We will go through all of the elements for one sound before working with several sounds plus elements."

Now shuffle the element cards and put them in one pile, face down. Choose one of the sounds to work with, and ask someone to pick the first element card. Have that student put it under the sound. After each card is chosen and placed in the column under the sound, tell the students to make the sound as they think it would sound when modified by that element plus any other elements under that sound card. As before, students may use their voices or any objects around them to make the sounds. Remember that each card affects the original sound in some way. How much or how little depends on the students and you. The important thing is to see that the original sound is, in fact, altered by each element card so that the final sound is the product of all the cards.

Help the students concentrate on the changes they are making. Urge them to explore those changes until they have arrived at what they feel is the best sound of the sound when altered by all the elements.

After completing a single sound, choose elements for several more sounds. Each time a card is drawn, have the students work only on the sound under which that card is placed. Once the students can remember the new quality, have them sound off the whole board, from left to right, with special attention to the new one.

Tape-record the experience for playback and discussion.

SUBJECT AREA(S)

The subject area is Aesthetics in the Physical World: Music.

Subject matter includes introduction of sound as a phenomenon inherent in many objects in the environment, basic qualities of sound, and organization and manipulation of real and imagined sounds.

INTENDED USERS AND BENEFICIARIES

Introduction to Sound was designed for use by kindergarten and 1st-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students: (1) To become aware that sound is a basic phenomenon in the environment; (2) to learn that sound can contribute to aesthetic experiences, either naturally or through the expression of an artist; and (3) to become aware of the multitude of sounds in their everyday surroundings and of the potential of these sounds as musical expression.

PATTERNS OF USE

Introduction to Sound is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music or linked with other Aesthetic Education Program packages which deal with motion, light, and space, and which are clustered around Aesthetics in the Physical World.

ASSESSMENT PROVISIONS

While there is no formal testing, learning is assessed by teacher and student. Student performance and oral response are assessed. Guidelines for teacher evaluation are written in the teacher's guide.

TIME REQUIREMENTS

Introduction to Sound takes a minimum of 7 hours to complete. Additional discussion or repetition of parts of the lessons can lengthen this time. The 11 lessons require from 20 minutes to 1 hour to do.

IMPLEMENTATION PROCEDURES

Introduction to Sound does not require a specialist teacher. The lessons may be done with a small group or with a whole class. The teacher's guide carefully outlines all procedures.

The teacher is encouraged to let students expand their exploration of sounds and sound composition.

The materials in *Introduction to Sound* are in the final prepublication stage of design and will be extremely durable. There are no consumable items in this package.

Summary Cost Information

The amount of teacher materials needed for this package will not vary with the number of students being taught.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music can implement this instructional package. Workshops will be offered by the publisher, and curriculum consultation will be available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

RD 010 003

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the packages on a yearly basis.

The prepublication evaluation of this package was carried out with kindergarten and 1st-grade students in local schools. The results of specially constructed tests indicate that although students who had received instruction based on the package and those who had not were equally able to distinguish the dynamic level of sounds, students exposed to the package were better able to discriminate sounds of different pitch and duration, and to perceive silence. Package groups were able to perform also at, or above, the criterion level on a task involving rhythm.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
Sound cards	1 set per 6 students	*	No consumables	
Blank sound cards				
Element cards				
Silence cards				
Teacher materials:				
Sound tape in 4 parts		*		
Sounding board				
Blank recording tape				
Teacher's guide				

*Price not determined.

DEVELOPER/AUTHOR:

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Edward Sweda, Product Developer

AVAILABILITY

Introduction to Sound **bears a 1975 copyright date, and copyright is claimed until 1981. It will be available in fall 1975 from the publisher:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 004

INTRODUCTION TO SPACE (PART OF THE AESTHETIC EDUCATION PROGRAM)

An introduction for young children to what space is and how it is used in the environment

Introduction to Space, part of the Aesthetics in the Physical World group of the *Five Sense Store*, helps students become aware of spatial considerations in the world at large.

Through a filmstrip presentation, the students are made aware of what space is and how it is used in the environment.

The students also explore the spatial elements of height, width, and depth; the visual cues to degrees of distance in space; and the difference between two-dimensional and three-dimensional spaces.

The students also become familiar with some principal considerations in using and manipulating space. Through special manipulatives and activities, they explore the relationship between a space of a specific size or shape and the number of given objects which can fill that space. They explore how the properties of a space limit the amount and kinds of movement within it.

The students use their classroom as a laboratory for making decisions about the use of space. As they redesign their classroom, they draw on the functional and aesthetic considerations they have been exposed to throughout *Introduction to Space*.

Sample Lesson

(Addressed to Teachers)

Lesson 2

General Description: Through this experience the students will increase their ability to identify spaces and relate spaces to specific functions.

Procedure: Introduce the students to a space-function guessing game. Use the questions below as a beginning, and then add your own. (The students will have viewed the introductory sound filmstrip in the previous lesson.)

Give the students these instructions. I will name the thing that takes up a space or the thing that happens there. Then you see if you can give me the name of that space. Let me give you an example. If I say a space for airplanes, what would you say? (Airport is a possible response.) Now, if I say a writing space, what would you say? (Table, desk, and chalkboard are possible responses.) Yes, we could write on any of those spaces, couldn't we?

Let's try some more. What if I said a car space? What would that mean? (Something like a parking lot is a possible response.) Running space? (Sidewalk, gym, and playground are possible responses.) Sleeping space? (Bed is a possible response.) Cereal space? (Bowl is a possible response.) Teeth space? (Mouth is a possible response.) Monkey space? (Cage, zoo, and jungle are possible responses.) Cooking space? (Stove and pot are possible responses.) Boat space? (River, lake, and water are possible responses.)

Are we in a space now? What kind of space are we in? (Yes, a gym, classroom (or wherever you are) are possible responses.)

Be sure that the responses given by the students name a space which fits the object of function described. However, make allowances for whimsical responses typical of young children, and expect to get different answers which may be suitable for the same question. Include both two-dimensional and three-dimensional space-function exemplars in your game.

When you have concluded the game, lead the students in considering the general nature of space. Have students give their own definitions of space. Ask: "So, now what do you think a space is?"

Be satisfied with very general responses. Typical answers given by 5-, 6-, and 7-year-old children may be: "an empty place," "where things are," "where the planets are," "it's every place," "inside my shoe," "space to run (for example, to fly or walk)," "I have a space at home." Further exposure to the set of materials will add to the students' understanding of space.

You may want to try a variation of this game by allowing one student or a group of students to give the space-function clues to the rest of the children.

RD 010 004

SUBJECT AREA(S)

The subject area is Aesthetics in the Physical World: Visual art/sensory perception.

Space is a basic phenomenon of the environment which can be manipulated for functional and aesthetic purposes. Fixed spaces can be recognized and described by their shapes and sizes. Distance from an object plays a major role in the perception of that object. As an object recedes from the viewer, it seems smaller, loses detail, and may be partially covered by nearer objects. Three-dimensional space has width, height, and depth. Two-dimensional space has height and width, but no appreciable depth, although it may give the illusion of depth, as in a photograph. The size and shape of a given space determine the number and arrangement of the objects which can fit within it. Likewise, the size and shape of the objects determine the number and arrangement which can fit within a given space. People can make and affect decisions about their use of space both in their daily lives and in works of art.

INTENDED USERS AND BENEFICIARIES

The package was tested at the kindergarten and 1st-grade levels, but test results indicate that the package may be more appropriate at the 1st-grade, rather than the kindergarten level. Informal reports indicate that 2d and 3d graders could use the package as well.

GOAL(S) OR PURPOSE(S)

The purpose of this package is: (1) To introduce students to space as a phenomenon and to involve them in working with its elements of height, width, and depth; (2) to develop an awareness of functional and aesthetic considerations relating to space; and (3) to involve the students in creative problem solving related to the functional and aesthetic uses of space.

PATTERNS OF USE

Introduction to Space is a self-contained set of materials with activities that are sequential and cumulative. It may be linked with the rest of the packages in the Aesthetics in the Physical World group; used in connection with other Aesthetic Education Program packages in which space plays a part, such as movement, environment, and theater packages; used to develop gross motor skills and fine visual perception skills; and used in relation to an elementary physical science program.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

Introduction to Space requires 12-15 hours to complete, depending on class size and utilization of additional activities. Activities vary in length from 15 minutes to 1 hour.

IMPLEMENTATION PROCEDURES

Introduction to Space does not require a specialist teacher. The package was tested with kindergarten and 1st-grade children, but may be used with any primary level students. The activities are designed for use either by a large or small group of students, and the active participation of the teacher is greatly encouraged. Results from classrooms which tested the materials showed that groups in which the teachers were willing to give suggestions and to direct activities had much more success than those in which the teacher functioned only as an observer.

Many of the activities require extensive movement and need a large area of clear space. The teacher's guide carefully outlines all procedures.

Additional activities encourage the teacher to carry the concepts beyond the completion of the package.

Summary Cost Information

The materials needed for this package are the same regardless of the number of students being taught. Cost for one complete unit is not yet available.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in three separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher, and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on utilization of published materials.

The pilot evaluation of this package was carried out with kindergarten and 1st-grade students in local schools. A specially constructed interview was developed to assess the outcomes of instruction with the package. Students using the package scored significantly higher statistically than control group students on the conceptual segment of the interview. In doing this, they demonstrated a heightened awareness of space in their environment and a greater breadth of concept regarding the nature of space. Student and teacher satisfaction with the package was moderate, as measured in questionnaires and interviews administered after completion of the package.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Sound filmstrip*	1	Not yet available	No consumable items	
Large photograph	1			
Rugs	3			
Large cardboard circles	2			
Large cardboard squares	2			
Small circles	40			
Small squares	40			
Teacher's guide	1			

DEVELOPER/AUTHOR:

CEMREL, Inc.
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

AVAILABILITY

Introduction to Space carries a 1975 copyright date, and copyright is claimed until 1981. It will be available from the publisher in fall 1975. Order from:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 005

DRAMATIC CONFLICT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package to enable students in grades 1-3 to explore major elements of structuring a plot

One of the aesthetic elements of theater is dramatic structure. The ability to perceive any portion of this structure increases the sensitivity of the student as a spectator. One Aesthetic Education Program package, *Constructing Dramatic Plot*, enables students to explore major elements of structuring a plot: Character, setting, incident, conflict, crisis, and resolution. Another package, *Creating Characterization*, focuses on physical and vocal expression of emotions as major structural elements of drama.

This package, *Dramatic Conflict*, one of the Aesthetics and Arts Elements series of *Five Sense Store* packages, emphasizes one pivotal element in dramatic structure—conflict. Dramatic conflict is the interaction between a character and some force which is a potential obstacle to the character's achieving what is wanted and/or needed. The major concern of these lessons is that students perceive how conflict formation takes place. They will demonstrate this perception through the sorting of cards, discussion, storytelling, and improvisation.

Sample Lesson

(Addressed to Teachers)

Lesson 13: Creating a Simple Story With a Conflict

In this activity, students will work in pairs. They will use the card deck and the conflict story board to make up a simple story with a conflict.

One student should select a character card and a goal card. Place the cards in holders and the appropriate space on the board. The second student should choose a card that could cause a conflict and place that card in a holder. Each pair of students will work together to make up a story with a conflict. The first student starts making up and telling a story while slowly moving along the "story line" toward the goal. At some point in the story, the second student enters the story line to create the conflict, i.e., tries to stop the first character from reaching the goal. The students must decide whether the first character can get by the conflict and achieve the goal or whether the goal is prevented from being achieved. Thus, the students continue until their story is completed.

During this time, the teacher can circulate among the students to see whether they are utilizing the elements appropriately. If an impasse occurs in solving the conflict, the teacher should help the students out of their dilemma by asking leading questions.

Once the students are satisfied with their stories, the teacher can lead a "tour through story land." The "tour" can be conducted by leading the whole class from story board to story board. As the "tour" stops at each board, the appropriate students move their cards and tell the "tour group" their story. After the "tour" is completed, discuss the different conflicts that were presented when the stories were told.

The amount of time necessary for this activity should be decided by the teacher, depending upon the interest of the students.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Theater arts.

Subject areas include introduction of the terms "conflict," "goal," and "character"; interrelation of these three elements in a dramatic structure; and creation of stories which contain these elements.

INTENDED USERS AND BENEFICIARIES

Dramatic Conflict was designed for use by students in the 1st grade. It can be used successfully with 2d- and 3d-grade students as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to help students identify, describe, and manipulate major elements of dramatic conflict formation.

PATTERNS OF USE

Dramatic Conflict is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other theater-based packages developed by the Aesthetic Education Program to create a curriculum; or linked with AEP packages which are related to music, art, dance, and literature and which are clustered around aesthetics and arts elements.

ASSESSMENT PROVISIONS

While there are no formal tests, teachers and students evaluate learning through analysis of student oral response and student activities. Guidelines for assessment are in the teacher's guide.

TIME REQUIREMENTS

The lessons in *Dramatic Conflict* require approximately 10 hours to complete.

IMPLEMENTATION PROCEDURES

Dramatic Conflict does not require a specialist teacher. The package is designed as a whole-class activity with students working individually and in pairs. When working individually, the students may work at their desks. When students work in pairs, they will need more room to spread out their materials and do their improvisations. The teacher's guide outlines all procedures.

The materials in *Dramatic Conflict* are now in the final prepublication stage, and their durability is being based on information received from testing situations. Consumables will be minimal and will be purchased from the publisher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in drama can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the packages on a yearly basis.

Students from a variety of socioeconomic levels who were taught the pilot version of the package scored significantly higher on a test which asked them to identify the major concepts of the package (goal, main character, source of conflict) than did untreated students. Student and teacher satisfaction was high, as indicated by postpackage questionnaires.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:		*		
Character boards				
Goal boards				
Conflict storyboards				
Card decks				
Teacher materials:		*		
Filmstrip				
Card deck				
Teacher's guide				

*Undetermined at this time.

DEVELOPER/AUTHOR:

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Sharon Bocklage, Editorial Coordinator

AVAILABILITY

Dramatic Conflict is copyrighted and is scheduled for publication in late 1975. Detailed information can be obtained closer to the publication date from the publisher/distributor:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

Character
Conflict Story Board
Goal

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 006

MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)

Materials to introduce 3d-grade students to movement and its expressive elements

One of the Aesthetics and Arts Elements series of the *Five Sense Store* packages, this set of materials introduces students to movement as a phenomenon that pervades our own lives and almost all environments. The elements of movement, which give it form, are space, time, and force. Its aesthetic qualities become obvious when movement functions as a medium of expression through the manipulation of these elements.

The expressive potential of movement is extensive. It can be used in symbols and gestures representative of ideas, events, or feelings. For instance, the way one walks or stands may reveal feelings and thoughts, just as the way a dancer moves conveys a particular feeling. Movement can also be appreciated for its own innate qualities and forms. That is, movement can be appreciated simply as movement, as being expressive in its own right, not as an expression of something else—movement for movement's sake, so to speak. Such a variety of expressive potential has found its way into many art forms, such as kinetic sculpture, film, dance, and pantomime.

The purpose of this movement package is to develop an awareness of movement in general and of its expressive elements in particular. Through the manipulation of these same elements, movement can be employed as an expressive medium for art. This newly developed awareness will heighten students' perceptions of and responses to art work and to natural environmental occurences that involve movement as an expressive force.

To reach this goal, the students will explore and manipulate selected properties of space, time, and force via human movement. The students' own body movements serve as the tool with which they will experience, perceive, and respond throughout this package. Besides being a mode already familiar to young children, it provides a natural liaison with two of the art forms in which movement is used aesthetically—dance and drama. Although this is not geared to be a "dance" package, the students will have the extra benefit of manipulating, exploring, and improvising in their creative problem solving through the use of movement. The process, as well as the content, therefore, should provide the student with a better understanding, or at least awareness, of the aesthetic dimension of movement in the performing arts, theater, and dance.

Sample Lesson

(Addressed to Teachers)

Lesson 13: Manipulating the Elements of Movement for Expression

General Description: The students will shape movements of their own and vary their expressive effects by manipulating the elements.

Background: This last activity attempts to integrate the ideas in the package into a meaningful experience. Here the students will discover that all of the elements are operating at all times in any movement and that changing any one element will affect the total movement. Thus, the previous exposure to simplify the nature of movement (energy in space during time is now carried to a beginning awareness of form (interrelationship and organization of the elements). While the package ends with this activity, the students' thinking is, hopefully, opened up and stimulated for future experiences.

Procedure: Have the students each find an empty space to work in. Direct them to make a movement that uses their head and one leg. Give them a few minutes to practice it so that it is defined and set.

Encourage them as they practice to find something on their own which is special to them and not a copy of their neighbor's movement.

When they all seem to be ready, tell them to do the same movement, but change the timing in some way. "Try to take longer or shorter; try it very fast or very slow. Which is best for your movement?"

Next, have them go back to their original movements before timing change. Say, "Now change the space it takes to do it in."

Again, have them return to their original movement. "Now change the energy you use to do your movement. Try it jerky, smooth, sharp, relaxed."

Give them time to explore and be slightly frustrated until they discover a solution for each change. You may help those who are having great difficulty by suggesting a variation for them to try.

Repeat this process with a new movement including the back, one arm, and one foot.

Finally, set the task. Tell the students to find a movement that uses their whole body, practice it until it is just right; and then change it three times–change the timing, then change the space, then change the energy.

Suggest that they practice all their changes until they feel ready to show them to a friend. After they demonstrate their movement, have them watch their friend's movement. They should tell one another if they can see the change in space and then in timing and in energy. If not, they should work on it more until it's clear and then show it again. If some students seem unable to work alone, suggest that they work with a partner or in a small group of three.

If some students want to demonstrate their work to everyone else, by all means allow it. But do not force performance. Premature performance can produce self-consciousness and inhibit creativity. It is always best to have students demonstrate in groups of three or four at a time.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Dance.

Expressive potential of movement; familiarity with and manipulation of the elements of movement—space, time, and force—integration of elements of movement into an aesthetic form.

INTENDED USERS AND BENEFICIARIES

Movement was designed for and formally tested with students in the 3d grade. At the discretion of the teacher, it would be suitable for 4th-grade students as well.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are to enable students: (1) To become aware of movement as a phenomenon that pervades our lives; (2) to become familiar with, and to be able to manipulate, the expressive elements of movement; and (3) to become aware that through the manipulation of these same elements, movement can be employed as an expressive medium for art.

PATTERNS OF USE

Movement is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance, or linked with other AEP packages which are related to music, art, drama, and literature and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

One diagnostic activity is included with the materials, and it is for pretest/posttest use only. Throughout the activities student learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the teacher's guide.

TIME REQUIREMENTS

The lessons in *Movement* require approximately 12 hours to complete. The teacher is advised to spend no more than 40 minutes at a time on any one lesson.

IMPLEMENTATION PROCEDURES

Movement does not require a specialist teacher. It can be taught to small groups or large groups of students. All of the lessons require a large, clear floor area for movement explorations. The teacher's guide outlines all procedures for the teacher and has been rated as quite useful in testing situations.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in dance can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States, using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the packages on a yearly basis.

The pilot evaluation of this package was carried out with 3d-grade students in local schools. One diagnostic test having two major components (verbal and visual) was constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The tests were administered in the classrooms which participated in pilot trial and in an equal number of control-group classrooms. When students who had taken the full unit were compared with control-group students, those instructed with the unit earned higher scores on each of the two components. The score differences in favor of students who used the materials were statistically significant. Student performance on this test supports a claim for product effectiveness. The product cultivates in students a realization that through manipulation of these elements—space, time, and force—movement can be employed as an expression medium for art.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 "Your Body Moves" booklets 3 20-ft. lengths of colored yarn	1 set per 6 students	*	No consumables	
Teacher materials:		*		
Body charts Fabric bag Sand clock Set of 8- by 10-inch photos Film, "Movement in Dance" Teacher's guide				

*Prices for these materials have not yet been determined.

DEVELOPER/AUTHOR:

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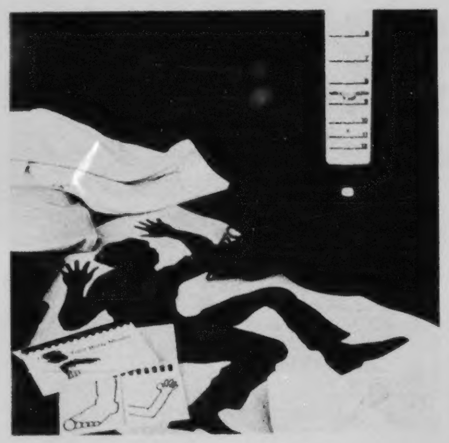
Sharon Bocklage, Editorial Coordinator
Linda Slama Kelly, Product Developer

AVAILABILITY

The anticipated completion date of *Movement* is late 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 007

NONVERBAL COMMUNICATION (PART OF THE AESTHETIC EDUCATION PROGRAM)

A set of materials which introduces primary students to nonverbal communications in their environment and in the theater

This set of materials, one of the Aesthetics and Arts Elements series of the *Five Sense Store* packages, introduces primary students to nonverbal communication both in their immediate environment and in the theater.

Much of theater is not conversational, but action or mood expressed in movement and vocal qualities. This is a theater package; hence, one of the goals of the package is to help students become more appreciative of how nonverbal communication is used as an element in the total theatrical process. However, unless the students can begin to interpret their immediate environment, including their own use of nonverbal communication, they will not be able to appreciate the subtleties of a theater experience, either as performers or as audience members.

The instructional materials in this package will expose students to a wide variety of nonverbal communication, help them decode or understand what is being "said" nonverbally, and give them the opportunity to experiment with encoding or enacting nonverbal communication.

To reach the package's goals, students participate in 10 activities involving various stimulus materials. A face board and transparent overlays of eyebrows and mouths in various positions allow students to experiment with these most mobile facial features and to perceive how these features convey emotions. To help them imitate the expressions they create on the face board and to aid in exploring the expressive potential of their own faces, the students use a metal hand mirror. A tape recording activity allows them to tell "emotion stories" explaining the faces which they have created on the face boards. A recorded activity song affords them an opportunity to manipulate their faces and bodies expressively. A 6-minute film, showing students the use of nonverbal communication in a theatrical setting and contrasting that usage with the daily use of nonverbal communication, extends the concept of nonverbal communication to include posture, movement, body relationship to another, and the expressive ability of hands. Another stimulus material is a recording which asks the students to identify various nonverbal vocal cues. Both student and teacher answer booklets are used in conjunction with the record. The flipbook facilitates the students' ability to look beyond stereotypes in decoding communication from clothing and hand objects carried by a person and to more fully understand the communication potential of costumes. Dressing in costumes collected by the class allows the students the opportunity to manipulate the visual nonverbal communication of clothing and hand properties and to begin to "try out" various roles suggested by the costumes. Finally, the students are asked to improvise a short skit using the nonverbal cues of costume, facial expressions, body movement, and body positioning in relation to another.

Through the use of the materials in this package, not only will students be receiving exposure to basic elements of theater, but, perhaps more important at this stage in their development, they should begin to become more effective and creative communicators in their daily lives, both as "senders" of messages and as "receivers" of messages.

Sample Lesson

(Addressed to Teachers)

Lesson 3: The Voice in Nonverbal Communication

Concept: Vocal qualities can communicate emotions, age, and ideas.

Background: Lesson 3 exposes the student to the concept that feelings are communicated by how the message is spoken. The student listens to incongruent verbal and vocal speeches. Verbal and nonverbal codes usually complement each other; however, both children and adults frequently find themselves receiving two messages simultaneously. When the two channels, verbal and vocal, provide conflicting cues, interpersonal

> understanding depends upon the priorities assigned by the communicator and receiver to the channels. For the child to gain an understanding of the psychological state of an actor or a communicator, formal, rational, and verbal communications are often of less value than the nonrational, nonverbal communications.
>
> Following exposure to incongruent verbal and vocal communication, the child listens to several speeches wherein the verbal content has been treated by an electronic filter making it difficult to understand. The child tries to identify the emotional content of each treated speech. This is possible because feelings are communicated, at least in part, by the form of a spoken message and because there are relatively stereotyped form/feeling correlations.
>
> Another part of the tape exposes the child to the concept that vocal qualities express more than emotional states. The student listens to an old man speaking and to a young girl speaking and then considers how the voice can communicate age. Next, the child discovers how vocal qualities can be used to enhance the communicative value of words. The tape asks the student to say words in such a way that the idea or connotation of words is relayed to the listener via vocal quality.

In the theater and in our daily lives, we are exposed to a wide variety of nonverbal vocal cues. If, early in their lives, children begin to attend to the information available in nonverbal vocal cues, they will become more effective communicators in their personal lives and more appreciative participants in theater experiences.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Theater Arts

Exploration of the communicative potential of the human face; exploration of communicative potential of posture, movement, and the body; exploration of nonverbal vocal communication; how clothing and hand properties communicate nonverbally; how such communication is used aesthetically in theater.

INTENDED USERS AND BENEFICIARIES

Nonverbal Communication was designed for and formally tested with 1st-grade students. It can successfully be used with 2d-, 3d-, and 4th-graders, as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to enable students: (1) To decode and encode various nonverbal stimuli or cues which communicate emotions, ideas, moods, and roles or conditions-in-life; (2) to perceive the function of nonverbal communication in their daily lives and in theatrical contexts; and (3) to use nonverbal communication consciously for creative purposes.

PATTERNS OF USE

Nonverbal Communication is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama or linked with other Aesthetic Education Program (AEP) packages which are related to music, art, dance, and literature and which are clustered around Aesthetics and Arts Elements.

ASSESSMENT PROVISIONS

While there are no formal tests, the teacher is provided with checklists for assessing student learning by observing their behavior on package tasks. In addition, the teacher's guide contains samples of appropriate and inappropriate student responses.

TIME REQUIREMENTS

The lessons in *Nonverbal Communication* require approximately 8 to 10 hours to complete.

IMPLEMENTATION PROCEDURES

Nonverbal Communication does not require a specialist teacher. Instructions are adaptable for small or large groups. Students work individually or in pairs through most of the lessons.

The materials in this package are now in prototype stage. They are being designed to be as durable as possible. Based on information received from testing situations, the materials in final form will be very durable.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot-stage, evaluation is carried out in three classrooms. In this stage the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

Despite the fact that there were administrative difficulties with the test sites (one classroom was eliminated because of a teachers' strike midway into the teaching of the package; in another, because of the team-teaching arrangement, the students originally using the package were reassigned and other students took their place), in one classroom all students indicated they "enjoyed" the package. A specially constructed test asked students, after receiving instruction, to respond to an emotion with an appropriate nonverbal communication. The evaluator scored student responses on a pass-fail basis. In two classrooms, the majority of students were able to show an emotion through facial expression, posture, body movement, gesture, and body placement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:		*		
Face boards				
Transparent overlays				
Metal hand mirrors				
Student answer booklets				
Flipbooks				
Teacher materials:		*		
Sound tapes ("Activity Song" lyrics)				
16mm film				
Answer booklet				
Guide to student behavior				
Teacher's guide				

*Undetermined at this time.

DEVELOPER/AUTHOR:

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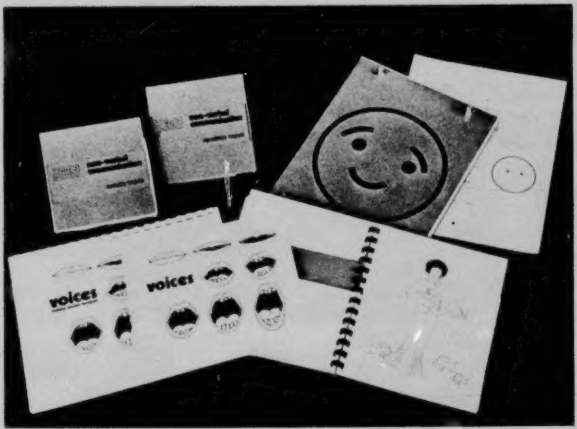
Blythe Rainey Cuyler, Product Developer

AVAILABILITY

The anticipated date of publication for *Nonverbal Communication* is late 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 008

PART AND WHOLE (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package designed to introduce students in grades K-2 to part and whole as a pervasive relationship in their lives

The Aesthetics and Arts Elements series of the *Five Sense Store* packages includes this set of materials which is designed to introduce kindergarten and 1st-grade students to part and whole as a pervasive relationship in their lives and environment, especially in people-created works of art. Working with their text, *Part and Whole*, and puzzles, photographs, and story cards, students find that a whole is made up of parts. Then they see that some wholes are also parts and some parts are also wholes. Finally, they explore the concept that introducing different parts into a whole can create a new whole or can give them a different feeling. *Part and Whole* is fundamental to the other packages in the Aesthetics and Arts Elements series. It presents the abstract organizing principle upon which the others are based. Thus, after working through this package, students can understand more easily how elements of natural occurrences or art works contribute to a pleasurable experience with the whole.

Sample Lesson

(Addressed to Teachers)

Lesson 3: Parts and Wholes in Pictures

General Description: The students each draw a picture of something their family does together. They examine their own drawings and learn that they use some of the same parts (elements) when they draw a picture that artists use when they create an art work. Through arranging shapes and lines from a painting included in their text books, the students see that people use certain elements to create a whole idea in an art work whether the idea expressed is realistic or abstract.

Procedure: Ask the students to draw a picture about something their family does together. Discuss with them which kinds of things these might be (e.g., sharing meals, taking a trip, watching television).

After they have completed their pictures, ask the students specific questions, e.g., "Which parts (shapes, lines, and colors) did you use to draw the people and things in your picture?"

This is the most important part of the activity. Compare the students' pictures to the three paintings on pages 22 and 23 of their book: "Did you use the same parts in your pictures that the artist used?" (Yes, for example, they used shapes for the people and things and color and lines for the grass.)

You may want to do this in small groups by having the students put up their pictures and talk about all of them.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual art, music, and sensory development.

A whole is made up of parts; a part of a whole can in itself be a whole; the whole (work of art) may change by rearranging or changing the nature of individual parts.

INTENDED USERS AND BENEFICIARIES

Part and Whole was designed for and formally tested with kindergarten and 1st-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is: (1) To develop students' ability to respond to the parts and the organization of parts in perceiving a whole work of art, (2) to develop perception of how parts function together in determining the whole, and (3) to develop awareness of the artist's behavior in selecting and arranging parts to create whole works of art.

PATTERNS OF USE

Part and Whole is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art, music, drama, or dance; linked with other AEP packages which are related to art, music, drama, dance, and literature and which are clustered around aesthetics and arts elements; used with sensory development curriculums; or used with language development programs.

ASSESSMENT PROVISIONS

Informal provisions are made for assessment of student learning in the package. Informal guidelines for assessment are built into the teacher's guide.

TIME REQUIREMENTS

Part and Whole takes approximately 10 hours to complete. The lessons can be done in 18 class sessions of about 30 minutes each.

IMPLEMENTATION PROCEDURES

Part and Whole does not require a specialist teacher. It is recommended that the students work in pairs and that they be seated on the floor when using the study cards and doing some of the other activities. The teacher's guide carefully outlines all procedures and has been rated as useful in field trials.

The package encourages the teacher to help students focus on parts and wholes in their environment and in works of art.

Part and Whole is not yet in final form. Therefore, an accurate statement about the durability of the materials cannot be made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in five separate classrooms of varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the package on a yearly basis.

The pilot evaluation of this package was carried out with grades K-1 students in local schools. Specially constructed tests indicate that students who receive package instruction were better able to perceive, to a moderate degree, parts of works of art in relation to the whole work than students who were not taught the package. Students who received package instruction also evidenced a greater gain in figure-ground perception than students who were not taught the package. Student and teacher satisfaction with the package was high, as measured by posttreatment questionnaires and interviews.

RD 010 008

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 face puzzles	1 set per 6 students	*		
3 mime puzzles: "Art Parts"				
3 sets of photographs				
3 sets of storycards				
Part and whole studycards				
3 *Part and Whole* books				
Teacher materials:				
Filmstrip presentation				
Teacher's guide				

*Undetermined at this time.

DEVELOPER/AUTHOR:

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AVAILABILITY

***Part and Whole* is copyrighted and will be completed by November 1975.**

INFORMATION CURRENT AS OF MARCH 1975 ■

RHYTHM/METER
(PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which helps students in grades 2-4 to become familiar with rhythm and meter in music

The second group of primary packages, Aesthetics and Arts Elements, includes this title, through which students become familiar with rhythm and meter in music and in other arts areas and the environment. A set of activity cards structure experiences with rhythm in visual pattern, in sounds, and in movement. A teacher's guide and a two-record set of musical selections are tools for investigating meter in music—the students listen and identify meters. The selections, ranging from classical and electronic music to folk songs, are supported by charts, recording sheets, and a series of posttests.

The Meter portion of the package focuses the students' attention on one element of musical composition, meter, and its relationship to a whole musical composition. After participating in the nine Meter lessons explained in the teacher's guide, the students will know that Meter is an important element in the composition of music. The goal of the three groups of *Rhythm/Meter* activity cards is to help the students extend the concepts in the Meter materials to other areas in their environment: They will experience pulse or beat in movement, discover and create visual patterns, and find rhythm in sounds and language.

Through the *Rhythm/Meter* activities, the students will find that rhythm is order in the movement all around them. The students can observe rhythm in the basic cycles and movements of their bodies, in patterns they see every day, and in sounds they hear. For example, they can feel a steady swing to their arms as they walk; they can observe the regularity of evenly spaced lampposts on a city street or of bricks in a house; and they can notice the sounds of heavy traffic pausing for a red traffic light and flowing at the green light. They see that rhythm is everywhere and that it is both natural and people-created.

Sample Lesson

(Addressed to Teachers)

Rhythm in Visual Pattern

New Patterns in Animals

Concept: Patterns help people identify objects, and objects take on a new appearance when the pattern is changed.

Objective: The students will know what a pattern is and recognize patterns in their environment. They will also be aware that if the pattern of something is changed, that thing will take on a new appearance.

Procedure: Review the nature of pattern with the students. Have the students investigate the classroom and their own clothes to find examples of patterns. Then ask them to name all the animals they can think of that have patterns (turtle, zebra, snake, and leopard). Point out to the students that they know these animals partly by their patterns.

Next, have the students use crayons to draw on the construction or butcher paper, simple outlines, without details, of their favorite animal in the zoo. Have them cut these out and lay them on the patterned side of the wallpaper or wrapping paper. (if they use the wrong side of the paper, the patterned animal will be backward for the next step of this activity.) Ask them to outline their animal. Then have them cut out the patterned-paper animal and paste it to the original. The animal suddenly has a new pattern.

Display the patterns in such a way as to create the feeling of a jungle or a zoo without bars. The students may want to add exotic trees, and so forth, for effect. Discuss with them how the new patterns give a new image to the animals.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Music, visual art, and dance.

Meter and its relationship to a whole musical composition; occurrence of visual pattern in the environment; order, shape similarity, and repetition as elements of visual pattern; rhythm as order in movement; interrelationship of rhythm in sound and movement; pattern formed by rhythm in sounds.

RD 010 009

INTENDED USERS AND BENEFICIARIES

Rhythm/Meter was designed for and tested with 2d-, 3d-, and 4th-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to enable students: (1) To know that meter is an important element in the composition of music; (2) to recognize and execute simple meters; (3) to learn some basic musical terms; and (4) to extend the concept of meter in music to other areas in their environment—visual pattern, movement, and sound.

PATTERNS OF USE

Rhythm/Meter is a self-contained instructional package. It may be used as part of an ongoing curriculum in music, dance, or visual art, or linked with other AEP units which are related to music, dance, visual art, drama, and literature, and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

Three student response sheets are employed as an integral part of the meter lessons. Four tests are included with the materials and are suggested for pretest/posttest or posttest-only use. Throughout the activities, student learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the teacher's guide.

TIME REQUIREMENTS

Rhythm/Meter takes approximately 12 hours to complete. The meter porition of the package requires about 3 hours and the rhythm activities take from 6 to 9 hours, depending upon how many the teacher chooses to do.

IMPLEMENTATION PROCEDURES

Rhythm/Meter does not require a specialist teacher. It can be taught in large or small groups. A large, clear space is needed for the movement activities and some of the sound activities.

Field reports indicate that the materials stand up well with repeated use. Consumables are minimal and can be easily purchased from the publisher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented without aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the packages on a yearly basis.

The prepublication evaluation of this package was carried out with 2d- and 3d-grade students in local schools. Six tests were constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The tests were administered in the classrooms which participated in pilot trial and in an equal number of control-group classrooms. When students who had taken the full unit were compared with control-group students, those instructed with the unit earned higher scores on each of the six tests. In each of the six tests, the score differences in favor of students who used the materials were statistically significant. Student performance on these tests supports a claim for product effectiveness. The product cultivates in students a heightened awareness of meter as one element of musical composition, and it extends this awareness to the concept of rhythm in sound, visual pattern, and movement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:		15.00*		
6 pads of response sheets (30 in each pad)			Consumable yearly	
8 pads of answer sheets (30 in each pad)			Consumable yearly	
Teacher materials:				
Teacher's guide		60.00*		
Record album with 2 12-in. LP disk records				
Set of 3 double-faced wall charts				
Set of 28 rhythm activity cards				

*Price subject to change.

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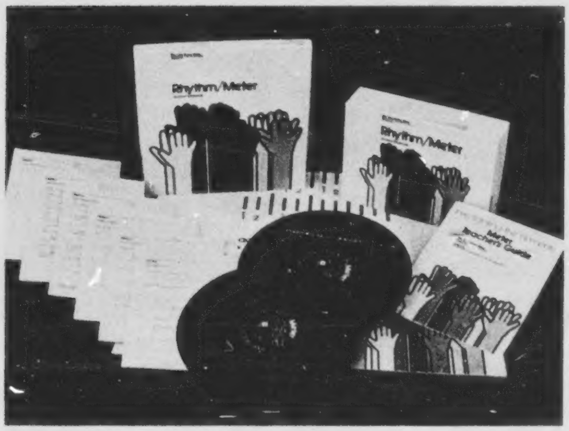
Dale Hamilton, Product Developer

AVAILABILITY

Rhythm/Meter was copyrighted in 1973, and copyright is claimed until 1981. It is currently available from the publisher/distributor:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 010

SETTING AND ENVIRONMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package for 2d graders and older students which focuses on the interactive nature of people and their environment

This package, part of the Aesthetics and Arts Elements group of the *Five Sense Store,* focuses on the interactive nature of people and their environment. Its intent is to attune students to how setting or environment affects human beings and whether this effect comes from natural surroundings, such as rivers, mountains, and forests; or from settings created by people, such as homes, furniture, schools; or from the set of a drama.

One purpose of this package is to prepare students to deal with the concept of setting as it is thought of in the theater. To appreciate theater aesthetically involves appreciating a number of dramatic elements, one of these being setting. Before dealing with this concept in its special relationship to theater, young students need to perceive the influence and importance of setting, or environment, in their daily lives. *Setting and Environment* is devoted to developing this perception.

Creating and fostering a sensitivity to our environment are of paramount importance in heightening feelings of personal responsibility toward our surroundings. It is a prime intent of this package to contribute toward such a sensitivity.

While experiencing the package materials, the students actually perform the function of both playwright and scene designer. The students are asked to express their affective reactions to changes made in their immediate environment and are given the opportunity to manipulate elements (physical objects, space, light, color, and sound) within a setting to create certain effects and to solve given design problems. The students become aware of how setting influences behavior. The package promotes individual awareness and aesthetic perception and helps students to become responsible for their natural and people-created environments.

Sample Lesson

(Addressed to Teachers)

Lesson 3

Concept: Settings can influence the way a person feels and behaves. By changing the elements within a setting, one can create feeling and behavior changes in the people who will be relating to that setting.

Objective: Through a filmstrip, the students will perceive a small boy's changes in feeling and behavior due to the manipulation of elements in his setting. They will also see the boy functioning sometimes as doer and sometimes as perceiver.

Procedure: This activity involves showing the filmstrip "Behavior Settings," in which one small boy's behavior changes as he experiences setting changes. During the filmstrip presentation, the teacher will need to allow time for student pantomimes of activities possible in each setting and time to discuss briefly the boy's behavior in each setting.

Each time a setting is projected without a child, the students should take turns improvising how they would act in the setting, using the setting as stimulus. For each frame, first ask for verbal responses to what the child would feel like doing in that setting. Then ask the child to pretend to be in that setting and to pantomime the activity. Emphasize nonverbal improvisation.

Keep the improvisations relatively short. Do not expect polished performances; instead, look for a willingness to participate and a freeing of children's expressive abilities.

Emphasis should be made that there is no right or wrong behavior for any of the settings in the filmstrip. The children should be encouraged to do what they feel like doing; they should be allowed to work in pairs if they wish to do so.

Before the filmstrip begins, explain:

"Now we will be looking at pictures which show how one small boy's behavior—what is felt, what is done— changes as the boy experiences different settings. The same room is used in every setting, but it is changed each time by adding different objects to it. First you will see each setting, and then you will see the boy in the setting."

Begin the filmstrip. The following questions will help in discussing the young boy's behavior in each setting and in drawing the students' reactions to each setting:

Frame 1: (A bare room)

Teacher: "How would you feel if you were in this room—happy, lonely, or bored? What would you do if you were in this room?"

While this frame is still on the screen, ask for volunteers to pantomime what they would do in the room.

Frame 2: (Boy standing in corner)

Teacher: "Here is what the boy felt like doing."

(The lesson continues with the rest of the filmstrip.)

SUBJECT AREA(S)

Aesthetics and the Arts Elements: Theater.

Every person stands in relationship to many settings. Settings are made up of light, sound, color, space, and furniture. When people design settings, they manipulate these elements. The planners of settings must also keep in mind the people who will be functioning in that setting, both the doers (actors or constructors) and the perceivers (audience).

Settings can influence the way a person feels and behaves. By changing the elements within a setting, one can create feeling and behavior changes in the people who will be relating to that setting.

In theater settings, all the elements and behavior are controlled. Theater settings are artificial settings rather than actual, even though some appear real (true-to-life) and others appear imaginary.

INTENDED USERS AND BENEFICIARIES

Although this package was designed for and tested at the 2d- or 3d-grade level, it may be used with older students as well.

GOALS(S) OR PURPOSE(S)

The goals of this package are to help students: (1) To acquire an understanding of the term "setting"; (2) to learn that setting is made up of the elements of sound, light, color, space, and furniture; (3) to realize the importance of doers (constructors) and perceivers (audience) in relationship to setting; (4) to observe and experience how setting affects feelings and behavior; and (5) to gain an understanding of theater settings as artificial settings in which the elements, feelings and behavior, and doers and perceivers are controlled. This is unlike real settings in which all of the above are not always predictable.

PATTERNS OF USE

This package is a self-contained set of materials. It may be used as part of an ongoing curriculum in theater, linked with other Aesthetic Education Program units which are related to theater and environment, and used in connection with the other packages in the Aesthetics and Arts Elements group.

ASSESSMENT PROVISIONS

While there are no formal tests, learning is assessed by teacher and student. Guidelines for assessing student performance and oral response are built into the package.

TIME REQUIREMENTS

The package requires approximately 15 hours to complete, depending on class size and utilization of suggested additional activities. Teachers generally devote 1 hour per day for 2-1/2 to 3 weeks.

IMPLEMENTATION PROCEDURES

This package does not require a specialist teacher. The package has been tested with students in grades 2 and 3, but may be used with older children as well. The activities are designed both for individualized experiences and group experiences and are to be teacher led.

Many of the activities will require rearrangement of the classroom and extensive movement.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

AESTHETIC EDUCATION

RD 010 010

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: first, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the package on a yearly basis.

The prepublication evaluation of this package was carried out with 2d-grade students in local schools. A test was constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The test was administered in the classrooms which participated in the pilot trial and in an equal number of control-group classrooms. When students who had taken the full unit were compared with control-group students, those instructed with the unit earned higher scores on the test. The score differences in favor of students who used the materials were statistically significant. Student performance on this test supports a claim for product effectiveness. The product cultivates in students a simulated imagination with regard to their environment.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
6 sets of theatrical gels	1 set per student	*		
Teacher materials:				
1 sound library (10 cassettes of sound effects)				
1 sound filmstrip ("Persons and Settings"; "Behavior Settings")				
1 teacher's guide				

*Cost per item not available at this time.

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Sharon Bocklage, Editiorial Coordinator
Blythe Rainey Cuyler, Product Developer

AVAILABILITY

The anticipated completion date of *Setting and Environment* is late 1975. The package is copyrighted. It will be available from:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 011

SHAPE (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which introduces primary grade students to basic concepts of shape

This package, part of the Aesthetics and Arts Elements group of the *Five Sense Store* materials, introduces students to concepts basic to a further exploration of shapes. The *Things About Shapes* book introduces package concepts and supplies instructions for the activities. Students discover that shapes are everywhere, that shapes are things and things have shape, that shapes are sometimes found inside other shapes, and that shapes put together make bigger shapes. In addition to working with *Things About Shapes*, students and teachers search the classroom and the outside environment for examples of package concepts; the students explore their new information about shapes in their own drawings; and they cut shapes from worksheets included with the package and arrange these to discover how small shapes can be combined to form larger shapes.

This package will encourage students: (1) To become aware that all things in our surroundings have shape and that shapes can be categorized—they will recognize that while the outline of a thing is often considered its total shape, the inside, the outside, texture, color, volume, and size are also aspects of shape; (2) to recognize shapes in different visual frames of reference—shapes within other shapes—and to be able to identify geometric shapes, biomorphic shapes, or combinations; and (3) to create shape compositions, which help them to perceive simple and complex visual relationships.

Sample Lesson

(Addressed to Teachers)

Lesson 2

Concept: Some shapes are inside other shapes.

Objective: By observation, the students recognize shapes in different visual frames of reference—shapes within other shapes—and are able to identify geometric shapes, biomorphic shapes, or combinations.

Procedure: The students will locate and discuss shapes inside other shapes from their immediate environment.

This lesson is an introduction to one aspect of the idea that complex shapes can usually be looked at as a grouping of smaller shapes. Being able to perceive and point out parts in larger wholes is a skill that allows young students to deal with complicated visual compositions without confusion or frustration. This same skill has wide applicability in dealing with other kinds of wholes—hearing the melody part, or picking out the number of tone colors in a musical work, for example, increases understanding of the whole work of music; or noting how an actor uses parts of the body in theatrical characterization—voice, face, arms, and hands—can make a complex series of events more understandable and meaningful to an informed audience member. This activity will help students deal more knowledgeably with a part-of-the-whole visual phenomena—shape.

Use the following questions to have the students demonstrate their understanding of the concept that shapes may be found inside other shapes.

"Look at your shoes. Can you find a shape inside other shapes?

"Look at the room. Can you find shapes inside other shapes?

"Can you find a shape inside of a shape inside of a shape?"

Consider using this exercise as a basis for group discussion so that you can tell whether the students can, in fact, perceive shapes inside other shapes.

Examples of shapes inside of shapes can be found in the student's booklet, *Things About Shapes*.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual Art

An infinite variety of shapes exists in the environment. Some shapes exist within other shapes, and some complex shapes are made up of smaller shapes. In combination with the other two shape packages (*Shape Relationships* and *Shapes and Patterns*), the visual elements of shape, color, texture, size, volume, and dimension are explored.

INTENDED USERS AND BENEFICIARIES

Shape is designed for students at the primary grade level.

AESTHETIC EDUCATION

RD 010 011

GOAL(S) OR PURPOSE(S)

The purpose of this package is: (1) To establish the relationship between an art element, shape, and the whole visual work; (2) to sharpen the students' abilities to perceive both simple and complex shapes; (3) to help students visualize the interrelationship between shape and other aspects of visual phenomena; and (4) to lead students to make aesthetic judgments about visual phenomena both in the environment and in the visual arts.

PATTERNS OF USE

Shape is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing elementary art curriculum, taught as a unit with the other two shape packages (*Shape Relationships* and *Shapes and Patterns*), linked with the other Aesthetic Education Program units in the Aesthetics and Arts Elements group, or used to develop basic sensory perception skills.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students are involved in assessing learning by analyzing student oral responses and student products. Guidelines for evaluation are contained in the teacher's guide.

TIME REQUIREMENTS

Shape requires approximately 15 hours to complete, depending upon the number of students a teacher has and whether students are divided into groups when working with the package. The various activities within the package require from 30 minutes to 1 hour to complete.

IMPLEMENTATION PROCEDURES

Shape does not require a specialist teacher. The package has been tested with students in the 2d grade, but it may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections will benefit from added information by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times, or may let individual students or small groups to work at various times, or may let individual students or small groups work independently with the materials.

Summary Cost Information

Packages can be purchased in varying multiples of 6, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost of one complete unit containing enough materials for one teacher and six students is $31.45.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The package was tested with 2d-grade students in local public schools from a variety of socioeconomic levels. One of the activities in the package was used as a test of students' achievement of package objectives. This activity presented a variety of shapes which students were to cut out and glue into a larger shape. At least 76 percent of the students were able to perform at or above the criterion level as judged by a panel of evaluators.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 *Things About Shapes* (books)	1 set per 6 students	27.50*	Worksheets consumable yearly	
3 pads of individual worksheets				
Teacher materials:				
Teacher's guide		3.95*		

*Price subject to change.

DEVELOPER/AUTHOR:

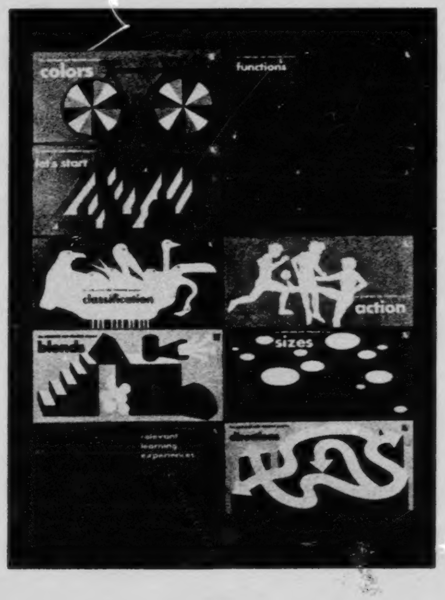
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapage, Product Developer

AVAILABILITY

Shape is currently available from the publisher. This product carried a 1973 copyright date, and copyright is claimed until 1981. Order from:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 012

SHAPE RELATIONSHIPS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which helps primary grade students explore relationship between shapes

This package, part of the Aesthetics and Arts Elements group of the *Five Sense Store* materials, helps students explore relationships between different shapes, between shapes and the environment, and between shape and other visual elements (texture, size, color, and volume). A book called *More Things About Shapes* presents the concepts, and foldup cubes and pyramids provided on worksheets reinforce the students' discoveries about the differences and the similarities between two-dimensional and three-dimensional shapes. Additional activities, such as the building of larger sculptural and architectural shapes with the foldup shapes, reinforce the relationships discussed in the book.

This package will encourage students: (1) To perceive that many things in the environment share the same or similar shape; (2) to discover that color, size, texture, and volume, as well as shape, give more complete visual information about a thing; (3) to perceive and analyze three-dimensional shapes from different physical points of view; and (4) to work with depth as it relates to shapes in space by combining two-dimensional shapes into shapes that have volume.

Sample Lesson

(Addressed to Teachers)

Lesson 1

Concept: Many things have the same shape.

Objective: The students will perceive that many different things in the environment share the same or similar shapes.

Procedure: The students observe different things which have similar shapes. They create different things from the same shapes by adding more lines and surface details, including color, texture, and volume. Their own drawings, and discussion about those drawings, help them understand the concept involved.

The students should become aware of objects that are round or circlelike. Help your students find things around them which are similar in shape, such as, clocks, lights, balls, oranges, and the like.

Select another general type of shape, perhaps things which are more or less square or oval, and repeat the above process. In looking for objects of rectangular shape, for example, the students might find windows, doors, boxes, bricks, desks, rooms, books, or chalkboards.

Have the students use the outlines on their worksheets and draw shapes. It is not necessary that the shapes the student draws have exactly the same outline. Rather, similarity should be the keyword for this activity: The concern is with things that look roundish, or free-form, or square, and so forth. The criteria for assessing student products are given here:

Fluency: The student should draw at least two things that share the same shape.

Flexibility: Each two things the student draws on the worksheet should show redefinition of the shapes provided and each should show a quite different thing.

While elaboration is not the main point here, the addition of details to the shapes should be encouraged.

Always watch for the spirit of experimentation in the students' work.

SUBJECT AREA(S)

Aesthetics and Arts Elements pertaining to general art is the subject area.

There are shape similarities among things different in kind. Some shapes having volume may be seen as composed of smaller shapes or planes; and volumetric shapes, too, may be combined to form larger three-dimensional shapes. Color, size, texture, and volume relate to shape. The representation of any object differs from the object itself.

INTENDED USERS AND BENEFICIARIES

Shape Relationships is designed for students at the primary grade levels.

GOAL(S) OR PURPOSE(S)

The purpose of this package is: (1) To help the students perceive that many different things in the environment share the same or similar shapes and that these things also have color, size, texture, and volume; (2) to help students perceive and analyze three-dimensional shapes from different points of view; (3) to discuss depth as it relates to objects and to two-dimensional representations of those objects; and (4) to lead students to make aesthetic judgments about their visual world.

PATTERNS OF USE

Shape Relationships is a self-contained instructional package with activities that are both sequential and cumulative. It may be used as part of an ongoing elementary art curriculum; taught as unit with the other two shapes packages, *Shape* and *Shapes and Patterns*; linked with other AEP units in the Aesthetic and Arts Elements group; or used to develop basic sensory perception skills.

ASSESSMENT PROVISIONS

Although there are no formal tests, learning is assessed by teacher and students. Student products are judged by both teacher and student, and the teacher is provided with guidelines for judging their work. Oral responses are also assessed and the teacher's guide contains clues for the teacher's evaluation.

TIME REQUIREMENTS

Shape Relationships requires approximately 15 hours to complete, depending upon the number of students and whether the teacher divides them into groups when working with the package. The various activities within the package require from 30 minutes to 1 hour to complete.

IMPLEMENTATION PROCEDURES

Shape Relationships does not require a specialist teacher. The package has been tested with students in grade 2 but may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections can be benefited by additional information supplied by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times or may let individual students or small groups work independently with the materials.

Summary Cost Information

Packages can be purchased in varying multiples of 6; for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately so that only one set of teacher materials need be purchased with two-, three-, four-, or five-student sets. Cost of one complete unit containing enough materials for one teacher and six students is $31.45.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying socioeconomic characteristics. The developers have received no reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcoming of materials is resolved by an appropriately directed review by a qualified expert outside the program. The materials are revised to eliminate any deficiencies detected in the review.

Information gained from classroom trial indicates the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They adhere to the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers monitor a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives that are evidenced by measurable differences in the behavior of the students who have studied the materials. The program continues to gain information on a yearly basis after the pilot trial is completed.

The pilot evaluation of this package was carried out with 2d- and 3d-grade students in local schools. Specially constructed tests indicated that at least 70 percent or more of the children were able to reach standards judged to be average, good, or excellent on tasks relating to the package after receiving instruction. Teacher satisfaction with the materials was also high, as measured by post-treatment questionnaires.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials: *More Things About Shapes* (books) 3 pads of individual worksheets	1 set per 6 students	27.50*	Worksheets consumable yearly	
Teacher materials: Teacher's guide		3.95*		

*Price subject to change.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational
Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

AVAILABILITY

Shape Relationships is currently available from the publisher. The product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 013

SHAPES AND PATTERNS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which helps students discover the relationship of shapes to patterns

This package, part of the Aesthetics and Arts Elements group of the *Five Sense Store* materials, helps students discover the relationship of shapes to pattern. Instruction is centered on the student book, *Things About Shapes and Patterns*, which introduces the students to how color, size, texture, and volume function in the formation of visual patterns. In addition to working with the book, students also use shapes provided on worksheets to create original patterns. They are encouraged to look for examples of patterns all around them—in books, in the classroom, in nature. Additional worksheets have foldup shapes that are used to create patterns of volumes.

This package will encourage students: (1) To become aware that a pattern made up of shapes employs shape similarity, repetition, and ordering; (2) to become aware that a visual pattern can also have color, size, texture, and in some cases, volume; and (3) to perceive and analyze similarity, repetition, and order of shape, color, texture, size, and volume in patterns found in works of art and in the environment.

Sample Lesson

(Addressed to Teachers)

Lesson 2

Concept—Patterns are made of more than shapes.

Objectives—The students will be made aware that a visual pattern can also have color, size, texture, and in some cases, volume.

Procedure—Students will be asked to create both flat and three-dimensional patterns. They will discuss color, size, texture, and volume in relation to patterns.

Grouping like or unlike shapes into a unit creates a new shape from the parts, and the new shape can be repeated to form a pattern. Further, color can be repeated on certain shapes or groups of shapes within a pattern, and the other elements—size, texture, and volume—can operate in the same way. Repetition, shape or shape unit similarity, and ordering remain the guiding principles.

The repetition of two things is discovered in this activity: One is repetition of shape units; the other is repetition of the colors of the shape units.

Students are asked to find a shape unit in their books. Specifically they are asked to point out the largest shape unit and whether they can see a pattern in the repetition of colors.

"How many different textures are repeated in this pattern?" "How would you describe each texture?"

"What shapes are repeated to make the pattern?" "How many different sizes are repeated in this pattern?" "What are the shapes that are repeated?" "What is the largest shape unit in this pattern?"

The worksheets which accompany this lesson provide the students an opportunity to make use of the concepts explored. They should be able to make patterns; to make use of color, texture, and size variations in the patterns provided on the two worksheets; and to create larger units of pattern by combining the different shapes provided.

Each student needs scissors, crayons or colored pencils, heavy paper (12 by 18 inches or less), and rubber cement or glue.

Watch for use of repetition, ordering, and use of similar shapes or shape units in student patterns. Allow students plenty of time to experiment and have fun with the patterns before they select their "best" to glue.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual arts.

Order and repetition and variation apply to pattern formation. A pattern is formed when one or more shapes are repeated or when elements such as color, texture, size, and volume are repeated.

INTENDED USERS AND BENEFICIARIES

Shapes and Patterns is designed for students at the primary grade levels.

GOAL(S) OR PURPOSE(S)

The purpose of this package is to help students: (1) To become aware that a pattern made up of shapes employs shape similarity, repetition, and ordering, and that a visual pattern can also have color, size, texture, and in some cases, volume; (2) to be able to perceive and analyze the elements of pattern in the environment and in works of art; and (3) to increase their ability to make aesthetic judgments about visual phenomena.

PATTERNS OF USE

Shapes and Patterns is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing elementary art curriculum, taught as a unit with the other two shapes packages (*Shape* and *Shape Relationships*), linked with other AEP units in the Aesthetics and Arts Elements group, or used to develop basic visual perception skills.

ASSESSMENT PROVISIONS

While there are no formal tests, students and teacher assess learning by analyzing both oral responses and student products. The Teacher's Guide contains guidelines for assessment of learning.

TIME REQUIREMENTS

Shapes and Patterns requires approximately 10 hours to complete, depending upon the number of students a teacher has and whether students are divided into groups when working with the package. The various activities within the package require from 30 minutes to 1 hour to complete.

IMPLEMENTATION PROCEDURES

Shapes and Patterns does not require a specialist teacher. The package has been tested with students in the 2d grade, but may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections will benefit from added information by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times, or may let individual students or small groups work independently with the materials.

MATERIALS AND EQUIPMENT

Summary Cost Information

Packages can be purchased in varying multiples of 6, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials needs to be purchased with two-, three-, four-, or five-student sets. Cost for one complete unit containing enough materials for one teacher and six students is $39.95.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and, third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. The program continues to gain information on the utilization of the published version of the package on a yearly basis after the pilot trial is completed.

The package was tested with 2d-grade students in local schools who came from a variety of socioeconomic levels.

One of the activities in the workbook was used to test whether the students achieved the package objectives. A panel of evaluators judged whether students met the criterion for making shapes into different patterns. Ninety-eight percent of the students performed at, or above, the criterion level.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 *Things About Shapes and Patterns* (books)	1 set per 6 students	36.00*		
6 pads of individual worksheets			Worksheets consumable yearly	
Teacher materials:				
Teacher's guide		3.95		

*Price subject to change.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

AVAILABILITY

Shapes and Patterns **carries a 1973 copyright date, and copyright is claimed until 1981. It is currently available from the publisher/distributor:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
Lincoln Center for the Performing Arts
New York, N.Y. 10022

Shapes & Patterns
Things About Shapes & Patterns
Patterns can be made by repeating shapes that have different colors

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 014

TEXTURE (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package to help young children better understand the qualities of texture in their environment and in the arts

Texture, one of the Aesthetics and Arts Elements group of the *Five Sense Store* packages, is designed to help students understand that texture has to do with both touching and seeing. A set of texture bags provides an assortment of tactile stimuli on which package activities are based. Sets of texture photographs provide visual correlates for the tactile stimuli to focus on how textures look and feel. Students use the tactile stimuli with a set of word cards to find the words to describe what they are touching. Photographs of art works encourage the students to transfer their learning to the exploration of texture in works of art. Through a group of art activities, students create simple art works which have textures.

This package will encourage students: (1) To look for, perceive, and describe qualities of texture in their environment and in the arts; (2) to perceive and identify relationships between tactual experience and movement; (3) to perceive correlations between visual and tactual properties; and (4) to identify textural qualities in visual art referents.

Sample Lesson

(Addressed to Teachers)

Activity 9: Identifying Textural Qualities in Art Reproductions

General description: The students will examine visual art reproductions for their textural qualities and compare them with the texture materials they feel in their bags.

Background Information: The following information about the textural qualities in works of art is not intended to be taught to your students, but to help you determine what they are looking at when they match the bags with the reproductions.

Visual artists employ texture in various ways. An artist employs texture in a tangible form by using actual materials, such as newspaper, seeds, wood, or cloth, in combination with paint, or by themselves. Works where it is actually possible to feel these textures include collage and assemblage, and artistic compositions combining these various materials into a unified design on canvas or board. A painter also creates texture on a two-dimensional surface by the heavy application of paint, gesso, or polymer, thus causing the pigment to stand out in relief. This kind of textural painting, termed "impasto," can be seen in many of the paintings of Vincent van Gogh, Maurice de Vlaminck, and Jackson Pollock. Another way the painter creates texture is by mixing paint with sand, sawdust, or other rough materials to get a textural quality. The painter and the sculptor use tools, such as the palette knife, a sponge, a pen, or a gouge, to produce individual texture characteristics. And the sculptor chooses materials—wood, clay, wire, stone—to work with, either enhancing the existing textures or manipulating them to create additional textural qualities. Thus, artists' use of texture suggests that texture is perceived by more than one sense. Artists ask us to see how a surface looks, to imagine what it feels like, and, in some cases, even to touch the work of art.

Procedure: Instruct the students to put all eight bags in front of them. Distribute the same art reproduction to all the students. For your convenience, the reproductions have been listed in an easy-to-hard progression from 1 to 12; that is, the texture in number 1 is relatively easy to identify, and that in number 12 is relatively difficult. This is simply a suggested order for dealing with the reproductions.

Say to the students: "Find the bag or bags that have textures that are the same or nearly the same as the textures you see in this work of art."

In most cases, several bags will be needed to fully describe the textural qualities in a painting. The students can further explore the different textures they see by sharing their responses and discussing their different choices.

In relating texture and subject matter, ask general questions: "What do you think the artist was trying to tell us? What if he used a different kind of texture? Would he be saying the same thing? Would you feel the same about the work?"

"What kind of texture would you use?"

"What kind of mood has the artist created? Happy, sad, spooky?" Did the textures he used help create the mood?

One point you might want to note for your students, if they mention it, is that some of the art works shown in the photographs are sculptures and paintings which use "impasto," so that the actual work of art could be felt in the same way as the materials in the bags. Other paintings, however, are flat and only make us think we can feel the textures in them. Some painters give us the feeling of a third dimension through the use of color, or lights and darks on a totally flat surface; others give us this feeling by actually building up the paint or by adding other materials to the canvas.

The following is a list of the 12 art reproductions with the texture bags that would be appropriate choices for each one. These choices are included to help you guide the students through the activity, but they are not definitive. There is a variety of possible responses for each reproduction. If you do not understand the students' choices, find out what they were looking at and touching when they made their decisions. If they can give you a valid reason for choosing a specific texture, accept it. For example, when asked why they chose the purple bag (stipple mat) and the orange bag (foam rubber) for number one, a student replied, "The shapes in the purple bag are round like the ones in the picture; and the material in the orange bag can be pressed down just like I think the shapes in the picture could be if I touched them."

1. Victor Vasarely, *CTA-104-E*—stipple mat (purple bag), sponge (orange bag).

2. Vincent Van Gogh, *The Starry Night*—shag carpet (light blue bag), matted fiber (yellow bag), synthetic fur (red bag).

3. Maurice de Vlaminck, *Houses at Chatou*—shag carpet (light blue bag), synthetic fur (red bag).

4. Henri Matisse, *The Purple Robe*—shag carpet (light blue bag), wire screen (dark blue bag), synthetic fur (red bag), ridged material (pink bag), stipple mat (purple bag).

5. Claire Falkenstein, *Point as a Set*—matted fiber (yellow bag), shag carpet (light blue bag), wire screen (dark blue bag).

6. Auguste Renoir, *On the Terrace*—synthetic fur (red bag), sponge (orange bag), shag carpet (light blue bag), matted fiber (yellow bag).

7. Jackson Pollock, *Grayed Rainbow*—matted fiber (yellow bag), shag carpet (light blue bag), synthetic fur (red bag).

8. Constantin Brancusi, *Mademoiselle Pogany*—acetate (green bag), stipple mat (purple bag), matted fiber (yellow bag).

9. Gustav Klimt, *The Park*--sponge (orange bag), stipple mat (purple bag), shag carpet (light blue bag), matted fiber (yellow bag), synthetic fur (red bag).

10. Victor Vasarely, *Capella*—ridged material (pink bag), wire screen (dark blue bag), acetate (green bag), stipple mat (purple bag).

Tell the students to squint and look for the hidden shapes in this photograph. Then ask which texture has that shape (the texture in the purple bag-stipple mat, for the circles

11. Yves Tanguy, *Rapidity of Sleep*—acetate (green bag), sponge (orange bag), fur (red bag).

12. Henri Rousseau, *The Waterfall*—shag carpet (light blue bag), ridged material (pink bag), acetate (green bag).

When your students have finished matching the 12 reproductions with the texture bags, you might want to compare the reproductions with one another to see how the same subject matter was handled with different textural effects. A grouping of the reproductions is provided below. Some of the titles appear in more than one group.

In talking about the reproductions, emphasize the feelings conveyed by the different textural renderings. Now would be a good time to show the color slides, pointing out to your students the difference that a new element (color) makes in works of art.

This activity should be extended by a visit to an art museum to look for textures in real paintings and sculptures.

SUBJECT AREA(S)

The subject area is Aesthetics and Arts Elements: Visual art.

This product focuses on exploration of the individual qualities which distinguish textures from one another, relation of texture and movement, relation of the visual and tactual properties of texture, the artist's use of real and illusionary textures in works of art.

INTENDED USERS AND BENEFICIARIES

Texture was designed for, and formally tested with, kindergarten and 1st-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is: (1) To let students experience texture tactually, visually, and kinesthetically and (2) to help them become more aware of it in the natural environment, the manmade environment, and in works of art.

PATTERNS OF USE

Texture is a self-contained instructional package with activities that explore texture from various sensory aspects. It may be used as part of an ongoing curriculum in art; linked with other Aesthetic Education Program packages which are related to music, dance, literature, and theater and which are clustered around aesthetics and arts elements; and used with perceptual development programs.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by judging student products and oral responses. Guidelines for assessing the responses are written in the teacher's guide.

TIME REQUIREMENTS

The activities in *Texture* require 12-20 hours to complete, depending upon how much discussion time is allowed and how many of the art activities are done. The activities are divided into 30-minute periods.

IMPLEMENTATION PROCEDURES

Texture does not require a specialist teacher. Students work in pairs on their own or within a larger group. A fairly large amount of space is needed for students to spread out their materials.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6 (such as, 12-student, 18-student, 24-student sets with teacher materials). Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

The prepublication evaluation of the package was carried out with kindergarten classes in local schools representing a variety of socioeconomic levels. While the differences in achievement on specially constructed tests were not statistically significant, package groups were better able to relate photographs of surfaces of textures to similarly textured natural objects and to discriminate tactually between textures on the basis of verbal instructions. Student and teacher satisfaction with the package was high, as indicated by an orally administered postpackage questionnaire.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 sets of texture bags (8 in each set) 6 sets of photographs (12 in each set) 3 sets of art reproductions (12 in each set)	1 set per 6 students	*	No consumables	
Teacher materials:				
1 set of word cards (40) 1 mystery bag 1 set of 35mm color slides (12) 1 teacher's guide		*		

*Cost not yet determined.

DEVELOPER/AUTHOR:

CEMREL, Inc.
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator

AVAILABILITY

Texture was copyrighted in 1974, and copyright is claimed until 1981. It will be available in spring 1975 from the publisher/distributor:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

thick
silky

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 015

TONE COLOR (PART OF THE AESTHETIC EDUCATION PROGRAM)

A group of materials which helps students from preschool to 5th sharpen their perception of one quality of sound, tone color

The second group of *Five Sense Store* materials, Aesthetics and Arts Elements, includes this package which helps students sharpen their perception of one quality of sound—tone color. A filmstrip introduces the idea of parts and wholes in many things—an egg, a building, and a musical selection. This idea is amplified in a sound, color film that shows and graphically points out the parts heard in a performance of a song called "Give a Million Cheers for Me." The students then listen to recorded musical selections, ranging from a drum pattern to Brubeck's "Take Five," and indicate the tone colors they hear with illustrated cards and a game board.

This package will encourage students: (1) To become aware of parts and wholes in the arts and the environment; (2) to come to an awareness of a musical whole being made up of smaller, distinct parts; and (3) to hear and recognize specific tone colors.

Sample Lesson

(Addressed to Teachers)

Activity 3: Identifying Tone Colors

General description: In this activity, the students will listen for tone colors on the records and will identify them by picture, name, or number on their tone color word sheets.

Classroom management: Before using the record with students, the teacher should listen to the explanation and the first few selections for activity 3. A period of 30 minutes should be enough to complete the activity with the students, but selections can be repeated and responses can be discussed.

First, explain the term "tone color" to the students: Tone color is the characteristic sound of an individual instrument or of a particular voice and is also known as timbre. The tone color of a sound permits the listener to distinguish between the sounds made by a guitar and a banjo, or between a violin and a clarinet.

When students are familiar with the meaning of the word "tone color," move to the record and tone color word sheet portion of the activity. The answers to each selection on the record are given at the beginning of the next recorded band and are also noted below.

The students can identify the tone colors by the red numbers on the tone color word sheets, by name, or by pointing to the illustration.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Music.

Introduction of the term "tone color;" concept of part and whole; recognition of tone color as an important, aurally distinguishable part of a musical selection; and familiarity with names and pictures of instruments that produce certain tone colors.

INTENDED USERS AND BENEFICIARIES

Although formally tested with children at the 1st-grade level, this product has been used in preschool and 5th grade, as well as all the grades between.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to help students focus on tone color so that they can come to an understanding of how the parts of a whole sound combination fit together and so that they can begin to judge and value the range of sounds and music around them.

PATTERNS OF USE

This product is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with other music-based units developed by the Aesthetic Education Program to create a curriculum; linked with other AEP packages which are related to art, dance, theater and literature and which are clustered around Aesthetics and Arts Elements; or used with basic sensory development programs.

ASSESSMENT PROVISIONS

Learning is assessed by both teacher and students. Provisions for assessment are built into the teacher's guide, and the final activity of the package focuses upon application and evaluation. Response sheets and recorded musical examples are provided along with advice to the teacher for interpreting assessment results.

TIME REQUIREMENTS

This product takes 5 to 9 hours to complete, depending on the amount of discussion the teacher encourages and whether parts of activities are repeated. The activities require a minimum of one-half hour each.

IMPLEMENTATION PROCEDURES

This product does not require a specialist teacher. It may be taught in small groups or large groups, depending on the teacher's wishes. The teacher's guide outlines all procedures clearly and has been rated useful in field trials.

The teacher is encouraged to challenge students to apply the part-and-whole concept to other things they perceive and to apply their learned approach to listening.

Field reports indicate that the materials are durable. Consumables are minimal and can be purchased from the publisher.

Summary Cost Information

This product can be purchased in sets of varying multiples of 6 (12-student, 18-student, or 24-student sets). Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $117.50.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in music can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on utilization of the published version of the package.

The prepublication of the unit was carried out with 1st-grade students in local schools. Students responded favorably to the set of materials during classroom trials as evidenced by their responses on a questionnaire. Teachers who used the materials were generally favorable to them as indicated by their responses to a questionnaire at the conclusion of the pilot trial.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials: 6 "How Many?" word sheets 6 sets of tone color cards (26 in each set)	1 set per 6 students	37.50*	Response sheets consumable yearly or after 5 implementations with a total of 30 students	
Teacher materials: Teacher's guide (24 pp) 16mm sound color film Color filmstrip Record album with 2 12-in. LP disk records		80.00*		

*Price subject to change.

DEVELOPER/AUTHOR:

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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

AVAILABILITY

***Tone Color* carries a 1973 copyright date, and copyright is claimed until 1981. It is currently available from the publisher:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975 ■

THE ACTOR
(PART OF THE AESTHETIC EDUCATION PROGRAM)

A package designed to acquaint students in grades 4-8 with actors

This set of instructional materials, one of the Aesthetics and the Artist series of the *Five Sense Store* packages, is designed to acquaint the student with actors—who they are and what they do. The materials include tapes or slide-tape presentations for each activity in which actors Mary Alice, Saundra Deacon, Will Geer, Paul Newman, Mary Lou Rosato, and Luis Valdez talk to the students about their experiences, training, research, practice, and performances.

In the set of materials, three lessons deal with the actor as an artist who develops through years of experience and learning, an artist who sharpens the nearly universal tools of body, voice, and mind to the point of being able to adapt to performing a wide variety of roles in various performance places and before various audiences. The students explore actor training by engaging in exercises suggested by the artists on the tapes. The students explore the process of acting by playing the acting game, which challenges them to build characters. The game asks the students to make choices of general character types, plots, and styles. A 5- by 20-foot visual environment (three-walled, hinged display board) provides an introduction to and summary of the primary concepts of the unit, and a cartoon-style student journal provides a place for the students to record their responses to the package.

This package will encourage students: (1) To make observations and judgments about the various ways people, including actors, express ideas and feelings through elements such as body and voice; (2) to listen to actor-artists talk about who they are, what they do, and how they do it; (3) to perform acting exercises and to build a character in an improvised scene based on their observations, the artists' comments, acting exercises, and their own experiences and imagination as guides to making critical choices; (4) to create a personal journal on actors in which they express their responses to the materials in their own words and in pictures; (5) to help choose and coordinate theatrical elements, such as directing, designing, executing, or managing, through a group-sharing process as they create improvised scenes; and (6) to perform their improvised scenes in an assigned place and for an assigned kind of audience.

Sample Lesson

(Addressed to Teachers)

Lesson 8: Variety of Roles

Concept: Actors change as a result of playing different roles, and roles change when played by different actors.

General Description: The discussion based on the students' observations will make the students more aware of the large number of roles actors, and most of us, "play" as compared to the relatively few roles we and actors assume in real life. The tape of Deacon, Newman, and Rosato will draw attention to the way actors' voices, bodies, and minds change as they play a variety of roles. By playing the acting game "Variety of Roles" segment, the students will experience playing different roles.

Procedure: Put up the "Variety of Roles" section of the visual environment. Point out the concept statement: "Actors change as a result of playing different roles, and roles change when played by different actors." Tell them that the four pictures represent a range of roles Will Geer has played.

Conduct a discussion of their observations. Whom did they observe that they wanted to play? Why? Have them think about the number of life roles they will assume—not roles they'll "play" but roles they'll "be." They will mention mother, father, daughter, worker, friend, grandchild, cousin, buyer, seller, and so forth. Now ask them to think of all the roles they've played, i.e., roles they've pretended. They may list many roles, e.g., nurse, dog, lion, tree, or astronaut. Tell them to consider how many roles an actress plays in a lifetime.

Tell them the tape is in two parts. The first part is a tape giving them a sound experience of a variety of the roles played by Ms. Deacon. The second half is a slide/tape in which Paul Newman talks about the specific effect that some of the roles he has played have had on him, and Mary Lou Rosato tells us how she has changed as a result of having played a wide variety of roles.

Remind them of the concept statement that actors change as a result of playing different roles and roles change when played by different actors.

Divide students into small groups for the "Variety of Roles" segment of the acting game. Check to see if promised things from activity 7—props, costumes, and so forth—have been brought. Students are to switch roles. Each person is to be briefed by the person who played that role in the previous activity. After the briefing period, break them out into an individual rehearsal period (5 minutes).

Have the groups rehearse for 5 to 7 minutes.

Have the groups share their scenes with the class.

Lead the class discussion based on two questions: (1) How did the role change when a different actor played the role? and (2) How did you as an actor change in order to play a different role?

Tell them they will go back to their original roles next time.

SUBJECT AREA(S)

Aesthetics and the artist: Theater arts.

Experiences, training, research, practice, and performances of actors; the actor as an artist who sharpens the tools of body, voice, and mind to react as desired; how an actor builds a character, other people involved in theater, e.g., set designer, costumer.

INTENDED USERS AND BENEFICIARIES

The Actor is being developed for use by 4th- and 5th-grade students. In all probability, it will be suitable for 6th-, 7th-, and 8th-grade students as well.

GOAL(S) OR PURPOSE(S)

The purpose of *The Actor* is to help students: (1) To know who actors are and what they do; (2) to know how experiences, training, research, and practice are put together in performance; and (3) to experience personally the creative process engaged in by the actor.

PATTERNS OF USE

The Actor is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; or linked with other AEP units which are related to music, art, dance, and literature and which are clustered around Aesthetics and the Artist.

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Actor is now going into the first stages of testing. Therefore, an accurate statement about the length of time needed to complete the lessons is difficult to make. It is estimated that 20 hours will be required to do all the lessons.

IMPLEMENTATION PROCEDURES

The Actor does not require a specialist teacher. The lessons require both large-group and small-group instruction. Since the package has not as yet been through any formal testing process, the usefulness of the teacher's guide has not been evaluated.

As presently planned, consumables are minimal and will be purchased from the publisher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in drama will be able to implement this instructional package. Workshops will be offered by the publisher, and curriculum consultation will be available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

The Actor is presently in development. When completed, it will be tested as defined in the *Basic Program Plan* (CEMREL, 1972). At that time, appropriate assurances and claims will be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:	Not determined	Not determined	Journal pads and answer sheets consumable	
Student journal pads				
Student journal binders				
Question sheets				
Acting Game				
Teacher materials:	Not determined	Not determined		
Sound filmstrip				
Tapes				
Visual environment board				
Teacher's guide				

DEVELOPER/AUTHOR:

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Donald Rickner, Product Developer

AVAILABILITY

The anticipated completion date of *The Actor* is November 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 017

THE ARCHITECT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A set of materials which introduces 4th- and 5th- grade students to architects and the realm of architecture

This set of instructional materials, one of the Aesthetics and the Artist series, introduces students to architects as persons who deal with form in function in designing buildings for people. The students explore the influences which affect the work of architects, the process of organization and decisionmaking through which their work develops, the people with whom architects work, and the end results—structures—of the whole process.

The instructional materials used in this package include a book of visuals illustrating the concepts that spaces which include people become places, an activity at a specific time becomes an occasion, and places plus occasions become architecture.

A sound tape of interviews with architects will help the students understand better what motivates architects and how they live and work.

Using a card file called "Create a Place," students will be asked to come up with solutions to various architectural problems. A large poster will show students all the things an architect has to know in order to design a building.

This package will encourage students: (1) To investigate their own spaces and how they experience them, (2) to become involved in activities that relate to the architects' perceptions and use of space and light, (3) to become involved in activities that involve decisions in relationship to form and function, and (4) to experience many types of architecture and explore their development in relationship to their previous experiences through the activities in the package.

SUBJECT AREA(S)

Aesthetics and the artist: Architecture.

Definition of architecture; some historical background of architecture; differences in functions between large buildings, for example, offices or theaters, and homes; places are created for people to participate in specific kinds of activities; the appropriateness of a place for a given activity is in part a function of its aesthetic qualities.

INTENDED USERS AND BENEFICIARIES

The Architect is being designed for use by 4th- and 5th-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students: (1) to understand that architects are people who deal with form and function in designing buildings for people, (2) to explore the influences which affect the work of architects, (3) to become familiar with the process of organization and decisionmaking through which the architect's work develops, and (4) to understand that "architecture is a human product which should order and improve our relations with the environment."

PATTERNS OF USE

The Architect will be a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art and architecture, or linked with other AEP packages which are related to music, art, dance, drama, and literature and which are clustered around Aesthetics and the Artist.

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Architect is in the developmental stage, therefore, no specific time requirements have been determined.

IMPLEMENTATION PROCEDURES

The Architect will not require a specialist teacher.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training will be able to implement *The Architect*. Workshops will be offered by the publisher and by CEMREL, Inc. Curriculum consultation will also be available from CEMREL, Inc.

ASSURANCES AND CLAIMS

The instructional unit, *The Architect*, is presently in development. When completed, it will be tested as defined in the Basic Program Plan 1972. At that time, appropriate assurances and claims will be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
"Create a Place" card file	*	*	*	
Student book				
"Spaces and Places" activity board				
Teacher materials:		*		
Sound tape				
Poster				
Teacher's guide				

*Materials are in developmental stage; decisions on packaging and costs have not been made.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
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Sharon Bocklâge, Editorial Coordinator
Jerilyn Kupferberg, Product Developer

AVAILABILITY

The anticipated completion date of *The Architect* is November 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 018

THE CHOREOGRAPHER (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which introduces 5th-grade students to the artists who create dances

The Choreographer, one of the Aesthetics and the Artist series of the *Five Sense Store* packages, introduces students to choreographers as creative artists who make dances which are presented in performance by dancer-performers.

To accomplish this, the students work primarily with a text, sound tapes, and their own bodies to identify the different roles of creators (choreographers) and performing artists (dancers) and to become acquainted with the materials of dance movement. As they use their bodies to explore the expressive potential of movement, the students will experience dance as a creative art. They will begin to understand the choreographer's creative, decisionmaking process by making their own creative and aesthetic decisions about movement, design, props, setting, and costumes.

This set of materials will encourage students: (1) To look for and describe movement in their surroundings and to perceive how this movement, transformed by the imagination of the choreographer, becomes the source of dance ideas; (2) to find new ways of using their bodies to move; (3) to select and organize movement to express a specific idea or feeling; (4) to appreciate the fact that the making of a dance is a highly personal, creative act, individual to every choreographer and to each dance; (5) to improvise their own movement studies using ordinary objects—a chair, ball, scarf—as a source of ideas; (6) to make careful choices of sound in combination with movement; and (7) to select theatrical elements—props, costumes, lighting, settings—which will enhance the movement and communicate the theme of a dance.

Sample Lesson

(Addressed to Teachers)

Lesson 5: Movement, the Language of Dance

Purpose and general description: The purpose of the activity is to teach students how to give their dances a clear beginning, middle, and end. The students compare the mechanics of turning words into a sentence to the structuring and organizing of movement into a dance. Then they select movement to illustrate a stimulus sentence.

Procedure: After the warmup, have the group sit on the floor in a semicircle facing the chalkboard. On the chalkboard, write, in scrambled order, the words of the following sentence: The dancers go round and round and around. Use no capital letters and no period.

Have the group unscramble the words so that they read: "the dancers go round and round and around." You may need to give them a little help. Ask them to tell you what is needed in order to make the words a proper sentence; i.e., the need for a capital T and a period after the last "around." Add the capital T and the period. Remind the students that in this way we know where the beginning and end of the sentence are.

Discuss with the group the idea that movement is the language of dance. Point out that the movements of a dance are like the words that make up a sentence; they must be selected carefully and organized to express the choreographer's idea.

Explain to the group that like a sentence, or a paragraph, or a whole story, a dance needs a beginning and an end. Tell them that in order to give their dances a beginning and end, they will do the following:

a. They will start with no movement, holding the opening position of the dance.
b. They will do the movements of the dance.
c. They will freeze on the last movement, holding it.

Demonstrate this for the group in this way: Stand in place with no movement at all. Then walk from one spot to another spot in the room. Hold your last movement for a few seconds, so that they can clearly see the end of your movement. Concentrate from beginning to end.

SUBJECT AREA(S)

Aesthetics and the artist: Dance.

Subject areas involve what choreographers do and where they get their ideas; movement as the material of dance and the body as an instrument for making movement; role of theatrical elements—music, props, lighting—in dance productions; and organization and presentation of student dances.

INTENDED USERS AND BENEFICIARIES

This product was designed for and is being tested with 5th-grade students. At the discretion of the teacher, however, it will be able to be used with students from 5th to 8th grades.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students: (1) To become aware that movement in their surroundings, transformed by the imagination of the choreographer, becomes the source of dance ideas; (2) to be able to perceive and describe the design of the movement in others' dances and to use design as the basis for a dance study of their own; and (3) to experience directly the creative process involved in choreography by making and performing their own dances.

PATTERNS OF USE

This product is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance; linked with other Aesthetic Education Program (AEP) packages which are related to art, music, drama, and literature and which are clustered around Aesthetics and the Artist; or used with physical development programs.

ASSESSMENT PROVISIONS

Throughout the activities, student learning is assessed informally by both teacher and students. Appropriate guidelines for assessment are built into the teacher's guide. A task checklist included in the last activity guides students in evaluating their own creative work.

TIME REQUIREMENTS

This product takes about 10 hours to complete. The activities are divided into 45-minute sessions.

IMPLEMENTATION PROCEDURES

This product does not require a specialist teacher. The activities are designed for large-group instruction. A large amount of clear floor space is needed for the movement explorations. The teacher's guide carefully outlines all procedures and gives explicit instructions in conducting the movement activities.

This product encourages the teacher to extend the concepts in the package by having students attend a dance concert or inviting local choreographers and dancers to pay a visit to the school; by watching for television programs on dance; by renting films on dance to show to students; and by suggesting an included bibliography on dance to students.

Based on information on the durability of materials in this prototype package, it is planned to make those in the published version equally as durable.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in three separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the aesthetic education programs' instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers monitor a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the packages on a yearly basis.

Results from the observations, testing, and teacher interview during the hothouse trial indicated that no major reconceptualizing or content revisions were necessary; the package generally achieved its own goals and those of the aesthetics and the artist series. Both students and teachers exhibited a high degree of involvement and satisfaction with the materials; however, these conclusions must remain tentative until testing at the three pilot sites is completed. *The Choreographer* materials were revised following the hothouse trial and will be revised again in light of the data obtained from the pilot trials.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 student books	1 set per 6 students	*	Idea sheets consumable yearly	
1 pad of idea sheets (30 per pad)				
3 secret word decks				
Movement cards				
Teacher materials:				
1 Teacher's guide		*		
1 choreographer's tape				
1 sound tape				

*Materials still in prototype stage; costs have not been determined.

DEVELOPER/AUTHOR:

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AVAILABILITY

The anticipated completion date of *The Choreographer* is November 1975. The package is copyrighted.

DANCE PEOPLE
idea sheet make a dance
making choices & putting them into action
grab bag
FREEZE
FALL

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 019

THE COMPOSER (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which introduces 4th- and 5th-grade students to composers as the originators of music

This set of instructional materials, one of the Aesthetics and the Artist series of the *Five Sense Store* packages, introduces students to composers as the originators of music. The students learn that composers are real people, individuals who have all kinds of ideas about sounds and are able to express their ideas for others to hear and/or perform. Students will see that a composer may be a primitive person in some distant land chanting to a self-made instrument in preparation for a tribal ceremony or may be a member of a technological society creating a composition for hundreds of performers or using electronic devices. The students will understand that the unifying factor between both efforts is the organizing of sounds for others to hear.

This package asks the students to focus on their own personal creative process, and to apply their findings to the making of music. For this purpose, the students will participate in a game in which they respond to cue cards which suggest an incident, a word, or an object. The students then translate their responses into musical meaning and share this meaning as the musical creator does. Through various media, the students will meet composers who explain what they do and how they go about doing it.

Throughout the set of materials, students will explore notation, instrumentation, and other elements which constitute the art of composing. The students will hear and see various systems, including the standard system of composition. A slide-tape presentation is used to demonstrate symbols, systems, and visual representations of the sounds which the students will hear in the presentation. The students will create their own symbol system which will be used to record their own sound ideas for others. Students will also be encouraged to select the instrumentation which will be used in expressing their sound ideas.

Throughout *The Composer* it is emphasized that the students can create compositions reflecting their personal decisions and feelings about sound, and that these compositions can be performed by others.

Sample Lesson

(Addressed to Teachers)

Lesson 3. An Impromptu Composition Period

Procedure: The beginning of this experience draws heavily on the teacher's willingness to portray the role of a composer. This portrayal simply attempts to illustrate for the class a thought process which could be used to create a sound composition. "It's as simple as watching sentences evolve into a paragraph and then, hopefully, into a personal literary statement—except in this case you substitute sounds for words or you add sounds to your words. Surely, we all have tucked away a little sound ditty which can be claimed as our own. With a slight touch of theater share your sound ideas with the class. Have fun."

After you feel that you have adequately portrayed the role of a composer, organize the students into teams of five. After the teams have been organized, distribute randomly to each team two or three sound idea cards. Ask the teams to look at the visuals and read the statements on the back of each card. Explain that these cards may give them some ideas about sounds for their compositions. Before the whole group is divided into team-planning huddles, have each team show the others which card the team has chosen as a sound idea card for their composition. At this point, they may even wish to give a hint as to what may happen.

Next, allow the teams to meet and plan separately. Tell students that each team must have a composer, performer, and conductor. Tell them also that it is the composers who come up with the sound ideas for their teammates to conduct and perform. They have to designate what each performer will do and with what (such as, voice, instruments). The audience role will be filled by the other teams.

As the individual teams are planning in various parts of the classroom and working toward their sound event, the teacher should visit with each team.

Setting Up the Teams:
"Who is the composer here?"
"How many performers are you going to use?"
"Are you going to use instruments?"
"Or are you going to use only voices?"
"Your compositions don't have to be very long."
"If you have a better idea than the card, use it."
Getting Ready for the Sound Event:

When all teams have finished planning their compositions, let the performance begin. The performing team's composer first shows the "audience" what his idea card was and then the conductor and performers proceed.

SUBJECT AREA(S)

Aesthetics and the Artist: Music.

The composer as originator of music; the organizing of sounds for others to hear as the artistic endeavor of the composer; exploration of the creative process engaged in by the composer; notation as a method of transmitting sound ideas created by the composer; creation of student compositions.

INTENDED USERS AND BENEFICIARIES

The Composer, now in the development stage, is being designed for use by 4th- and 5th-grade students. As with the other packages in the Aesthetics and the Artist series, it will be suitable for 6th- and 7th-grade students as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students: (1) To discover who composers are and what the process is which enables them to create sound ideas, (2) to become aware that the sound ideas of composers are transmitted to performers and listeners through a standard symbol system, (3) to devise their own symbol system as a means of understanding the creative process of professional composers, and (4) to be able to express their own ideas about sound compositions.

PATTERNS OF USE

The Composer is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with other music-based packages developed by the Aesthetic Education Program; or linked with other AEP units which are related to drama, art, dance, film, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

The Composer takes approximately 10 hours to complete.

IMPLEMENTATION PROCEDURES

The Composer will not require a specialist teacher. The individual lessons require both large- and small-group instruction.

Based on the information received during the testing process, materials will be designed to be extremely durable. Consumables will be minimal and easily purchased from the publisher.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music will be able to implement this instructional package. Workshops will be offered by the publisher and by CEMREL, Inc. and curriculum consultation will also be offered by CEMREL, Inc. Costs for these services will be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

At this point, the materials have received a preliminary (hothouse) evaluation based upon daily observation of trial in one classroom. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from hothouse trial suggests that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide. Materials are being revised in preparation for pilot trial.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on utilization of the published version of the package.

At this time, only the hothouse trial has been completed. Information received as a result of this trial has confirmed that this package merits continued development. Necessary revisions are being made, and the package will be advanced to pilot trial.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:	*	*		
Student book				
Student composing charts				
Idea cards				
Teacher materials:				
16mm film		*		
Sound tape				
Teacher's guide				

*Materials are in prototype stage; therefore, packaging and cost determinations have not been made.

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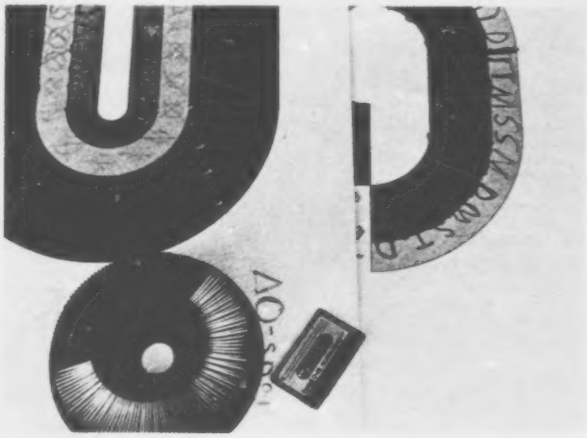
AVAILABILITY

The anticipated completion date of *The Composer* is November 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 020

THE CRITICAL AUDIENCE (PART OF THE AESTHETIC EDUCATION PROGRAM)

A set of instructional materials for grades 6-8 which explores the world of the artist's receiver, the audience

This set of instructional materials, one of the Aesthetics and the Artist group, explores the world of the artist's receiver, the audience—the people who respond to artists' works; who try to understand why artists create dances, musical compositions, and stories; and who attempt to learn where artists get their ideas. In this respect, the set of materials serves as a culminating or companion set to the other materials in this series. Activities ask students to become more aware of themselves as responders. Students begin with honest reactions about how particular works of art make them feel, then try to determine why they feel that way and, over a period of time, see whether their responses remain the same. If they do, why? If not, why not? Through activities in the classroom and out-of-class experiences, the students begin to analyze and judge artistic works by answering questions about the artist's possible intent, whether the artist succeeded in that intent, and whether the effort was worthwhile. Through hearing both other students' reactions and professional critics' reactions, the students discover a range of possible responses to any given artistic work. The professional critics are included as members of the community of responders and will not be the center of attention in the materials. Rather, the focus of the materials will be on students as responders, as growing members of the critical audience, an audience that is constructively aware and responsive to the creator and the creation.

SUBJECT AREAS

Aesthetics and the Artist: Art, dance, drama, film, literature, and music.

Focus on forms in art works; analysis of responses to works of art; learning of skills of responsible criticism.

INTENDED USERS AND BENEFICIARIES

The Critical Audience is being designed for 4th- and 5th-grade students. As with all the packages in this series, however, it will be suitable for 6th-, 7th-, and 8th-grade students as well.

GOAL(S) OR PURPOSE(S)

The goals of this instructional package are for students: (1) To become aware of themselves as members of the community of responders without which art works would exist in a vacuum, (2) to recognize that their active participation is crucial to energize the interaction between creator/creation and responder, (3) to learn that within the community of responders are professional critics whose ideas about their work may be of value to the students in evaluating their own aesthetic experiences, and (4) to begin to use critical skills (perceiving, analyzing, judging) to evaluate works of art within the classical critical structure.

PATTERNS OF USE

The Critical Audience will be a self-contained unit of instruction. It may be used as part of an ongoing curriculum in any of the arts disciplines or linked with other Aesthetic Education Program (AEP) packages which are related to music, art, drama, dance, and literature and which are clustered around Aesthetics and the Artist.

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

As this package is still in the developmental stage, specific time requirements have not yet been determined.

IMPLEMENTATION PROCEDURES

The Critical Audience will not require a specialist teacher. Other information concerning the implementation of the package is not available at this time.

MATERIALS AND EQUIPMENT

As the activities in *The Critical Audience* are still in the developmental stage, no materials have been decided upon.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training will be able to implement *The Critical Audience*. Workshops will be offered by the publisher, and curriculum consultation will be available from CEMREL.

ASSURANCES AND CLAIMS

The instructional unit, *The Critical Audience*, is presently in development. When completed, it will be tested as defined in the *Basic Program Plan 1972*. At that time, appropriate assurances and claims will be made.

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Bennett Tarleton, Product Developer

AVAILABILITY

The anticipated completion date of *The Critical Audience* is November 1975. The package is copyrighted. The distributor is to be announced.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 021

THE FILMMAKER (PART OF THE AESTHETIC EDUCATION PROGRAM)

A set of instructional materials suitable for grades 4-8 which explores the world of the filmmaker

This set of instructional materials, part of the Aesthetics and the Artist series of the *Five Sense Store* packages, explores who filmmakers are, where they get their ideas, how they plan and develop their ideas, and what they must know and do to create films.

The materials provided in the package engage the students in activities and experiences designed to increase their perceptions of filmmakers as people and creators. The students participate in the process of making decisions used to create a film—the same process filmmakers use. Students move from the discovery and selection of an idea through the initial stages of its development to the making of creative, technical decisions which achieve the effects needed to express the chosen idea.

The materials involve students in three kinds of explorations. First, the students see a selected sequence from the film "How Does A Rainbow Feel?"; afterwards they briefly discuss the story of the film. Following the discussion, they see and hear a slide-tape presentation in which they meet the filmmaker, Director David Holden. He tells them about himself and about the creation of the film they have just seen. Holden talks about the filmmaker as a person in the everyday world, about where ideas for films are obtained, about how the idea for a selected sequence originated, and about how the sequence was planned. The slide-tape presentation also introduces the students to the people with whom a filmmaker works and explains how these people contribute to creating the effects that communicated the chosen idea.

The contents of the student book are organized in the same sequence filmmakers follow in creating a film—from conception of the idea, through the planning of the idea's expression, to the making of creative technical decisions, and finally to the editing stage, when the film pieces are selected and sequenced to help express the chosen idea. The book is graphic, containing many photographs of filmmakers at work and stills from selected films. Also included in the book are quotes from filmmakers and an interview with Alfred Hitchcock in which he describes the process he uses in creating films. Throughout the set of materials, the students engage in activities similar to those filmmakers use in creating a film.

The concluding lesson provides options for the students to engage in the total creative process of filmmakers. They can experience selecting an original idea, thought, or feeling; planning a way of expressing it on film and showing the expression to an audience.

Sample Lesson

(Addressed to Teachers)

"Combining Flipbooks"

Purpose and general description: The purpose of this activity is to reinforce the material on motion and idea described before and to introduce the concept that increasingly complex ideas can be communicated by adding and arranging images. For this purpose the students will share with each other the flipbooks they created in activity 2 and will investigate the potentials of putting together a number of flipbooks to express a new and more complex idea.

Procedure: Have the students share with each other the flipbooks they created in activity 2. Tell them that as they show their flipbooks, they should state the idea they chose to express. Then they should flip the pages to show the images they selected to express their idea. They might flip their books quickly once, creating the illusion of movement, and then turn the pages slowly so that the other students can easily see the changes from image to image.

Ask them to talk about which flipbooks could be put together to express a new, longer idea. The combined flipbooks may actually become something like a story.

As the students begin making choices about which flipbooks to put together encourage them to try out different orders. Point out that in these ways they are creating new and more complicated ideas.

For example, in activity 2 one student may have chosen to create a flipbook in which a ball rolls across the pages, one may have created a moving car, another a clock with hands that move, and still another may have shown the occurrence of an explosion.

The students might decide to combine these flipbooks in any of the following ways: (1) Ball chasing car, clock hands moving, explosion; (2) car chasing ball, clock hands moving, explosion; (3) clock hands moving, car and ball moving, explosion; (4) explosion, ball and car moving, clock hands moving. When the students have made their choices, staple together the selected pages from the flipbook pads. See that all the students have a chance to flip through the new combinations.

You might conclude this activity with a brief discussion based on questions such as: "Did you like any of the combinations better than others?" "Why?" "What ways have we found that we can make a simple idea more complex?"

SUBJECT AREA(S)

Aesthetics and the Artist is the subject area of this film which explores who filmmakers are and where they get their ideas; idea that movement in film is an illusion and how it is created; basic structural elements of film—shot, scene, sequence—and how the filmmaker manipulates these to achieve a desired effect; process of planning and decisionmaking used to create a film; how films are edited and involvement in actual process of making a film.

INTENDED USERS AND BENEFICIARIES

The Filmmaker is being designed for 4th- and 5th-grade students. As with the other packages in the "Aesthetics and the Artist" series, it will be suitable for 6th-, 7th-, and 8th-grade students.

GOAL(S) OR PURPOSE(S)

The goals of *The Filmmaker* are for students (1) to perceive filmmakers as persons in the everyday world and as artists creating within their chosen medium; (2) to discover that the sources for filmmakers' ideas and for their own ideas are the same; (3) to explore the relationship between the visual, aural, and kinetic nature of film and how it is used by filmmakers to express ideas; and (4) to experience the process filmmakers use in creating a film.

PATTERNS OF USE

The Filmmaker, now in the prototype state, is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in film arts or linked with other Aesthetic Education Program packages related to music, art, dance, drama, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Filmmaker takes approximately 15 hours to complete. There are 18 activities which are of varying length of half an hour to 2 hours.

IMPLEMENTATION PROCEDURES

The Filmmaker does not require a specialist teacher. The various activities call for differing methods of instruction. Sometimes the students work independently and sometimes they work in groups.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training is able to implement this instructional package. Workshops are offered by the publisher and by CEMREL. Curriculum consultation is also available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

The instructional unit, *The Filmmaker*, is presently in development. When completed it will be tested as defined in the *Basic Program Plan 1972*. At that time appropriate assurances and claims will be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
Books, pieces of film, flipbook pads, planning card games, story board sheets, Captain Cinema comic books, and viewfinder sheets	1 set per 6 students	Not determined	Flipbook pads, story board sheets, and viewfinder sheets consumable yearly	
Teacher materials:				
Sequence from a film, filmstrip and recorded sound track, and teacher's guide		Not determined		

DEVELOPER/AUTHOR:

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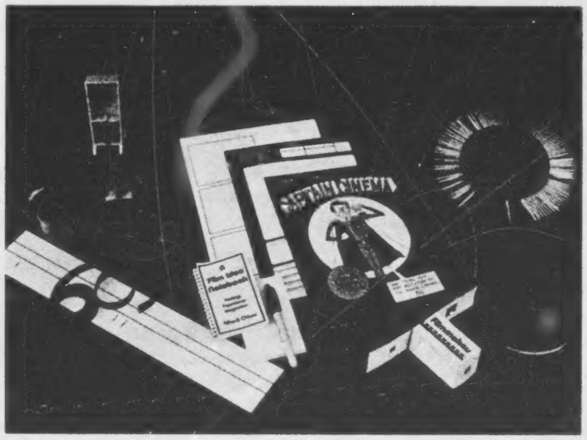
Sharon Bocklage, Editorial Coordinator
John Porter, Product Developer

AVAILABILITY

The anticipated completion date of *The Filmmaker* is November 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 022

THE VISUAL ARTIST (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package suitable for grades 4-8 which introduces the visual artist as a real person

This set of instructional materials, one of the Aesthetics and the Artist Group of the *Five Sense Store* packages, introduces students to the visual artist as a real person whose chosen work is creating visual images based on perceptions, skills, personality, and experiences. The visual artist has responsibilities, commitments, and the same basic needs (food, clothing, and shelter) as other individuals. The visual artist communicates experience and feelings by selecting and shaping visual elements into a whole work. The quality that separates one artist from another is the way each artist organizes, interprets, and communicates personal perception of the environment in a visual mode. This quality is something that all visual artists have in common. Their choice of media and style is where they differ.

Visual perception consists of four types of vision: Practical, curious, imaginative, and aesthetic. In the process of creating visual images, the artist may perceive environment through all four types of vision, whereas most individuals will stop at the practical or curious level.

The emphasis of the package will be on the artist's perception and interpretion of environment through visual images. There will be an opportunity for the students to hear interviews with four artists, Marisol, Robert Indiana, George Segal, and Richard Hunt, in order to understand better what motivates them and how they live and work. An introduction to the visual artist will include a book of visuals which will show the relationship of the artist's work to the environment, sound tapes through which the artists communicate directly with the students, manipulatives, and an activity booklet. The activities in the booklet will reinforce the concepts of the materials and give the students the opportunity to put themselves in the role of visual artists.

Sample Lesson

Lesson 3: Artists Make Decisions

(For the Teacher)

Concept: Visual artists communicate their experiences and feelings by selecting and organizing visual elements into a whole work.

Objective of the Lesson: After they have completed this lesson, students should be better acquainted with the decisionmaking process that artists go through when they organize and reorganize visual images. Students should also be more aware of their own decisions, that is, why they choose the lines, colors, shapes, and textures that they use; why they use more of one than another; and how they use these elements to express their ideas.

(For the Students)

Getting Acquainted

When artists are in the process of creating works of art, they have to make many decisions. In order to put together an idea and express their feelings, they have to decide which kinds of lines, shapes, colors, and textures would go together. They must decide how to arrange them. Sometimes they arrange their ideas many times before they find a combination that works for them. They will sometimes do many drawings before they put together a final work of art. Sometimes artists do not plan ahead; they just experiment with their materials, making decisions as they work until they work out something that pleases them and expresses their idea. An accident might happen and the artist may decide to make it an important part of the final work. Artists are always making decisions.

Working From a Plan

Exploring and Imagining

Get out the black-and-white puzzle and the colored puzzle. Choose the one you want. You will use the puzzle parts to make a plan for a picture. Try using both puzzles.

Planning and Doing

Pick any card from the artist's idea pack. Arrange the puzzle parts in a way suggested by the idea you pick. Experiment with the parts until you find something you like. You may have to make many decisions until you decide exactly what you want your picture to look like.

After you finish your puzzle plan, you are now ready to make your picture. Find some drawing materials, paint, or magazines, scissors, and glue and make a picture of your puzzle plan.

Remember how the artists talked about their work. You may also want to write a story talking about how you planned and made your picture in the same way. Think about all the decisions you made, and tell about them in your story. Do this activity more than once.

Showing and Sharing.

Share your picture and your story with your teacher, parents, and classmates.

SUBJECT AREA(S)

The subject area is Aesthetics and the Artist: Visual art with emphasis on how perceptions, skills, personality, and experiences contribute to an artist's creation of visual images; where the visual artist gets ideas; how the artist organizes visual elements in a whole work to communicate experiences and feelings; and how different experiences and knowledge of individuals lead to different reactions and feelings about the same work of art.

INTENDED USERS AND BENEFICIARIES

The Visual Artist was formally tested with 5th-grade students. It is suitable for students from the 4th to 8th grades.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students: (1) To become more aware of things they see around them; (2) to investigate their own powers of observation and perception; (3) to learn how artists perceive the world around them; (4) to develop a general idea of how artists interpret perceptual experiences through their art forms; (5) to understand that, like artists, they create different products from the same ideas; and (6) to acquire an understanding of how personal characteristics are evidenced in art.

PATTERNS OF USE

The Visual Artist is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art; linked with other AEP packages which are related to music, drama, dance, and literature and which are clustered around "Aesthetics and the Artist"; or used with perceptual development programs.

ASSESSMENT PROVISIONS

While there are no formal tests, student learning is assessed by both teacher and students. Analysis of student products and of their oral responses is the basic means of evaluating their learning. Guidelines for the evaluation are in the teacher's guide.

TIME REQUIREMENTS

The Visual Artist takes approximately 20 hours to complete. The time required for the activities varies with each one.

IMPLEMENTATION PROCEDURES

The Visual Artist does not require a specialist teacher. Students work in pairs through the package. The activities can be completely individualized and self-paced, or they can be done together in a large group. Or if the teacher prefers, a combination of the two methods may be used. A large display area for student work is needed. The teacher's guide outlines all procedures in a careful and interesting way. It has been rated as both very useful and original in testing situations.

The materials in *The Visual Artist* are in prototype stage. Based on the information in test situations about the durability of materials, we will design those in the final product to be as durable as possible.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

The information gathered from hothouse trial of the materials indicates that the package can stand alone in the hands of a competent teacher and can be successfully implemented without additional aid beyond that given in the teacher's guide. The developers have not received any reports of harm associated with the use of this product.

Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the package causes an appropriately directed review of the materials by a quaified person from outside of the program. The materials are revised to eliminate such shortcomings.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings of the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the packages on a yearly basis.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

A prepublication version of this package has been tested in one local classroom containing students from grades 4, 5, and 6 and from a mixture of socioeconomic levels. No quantitative data yet exist concerning student learning, but the students indicated a high degree of satisfaction with the package in postpackage questionnaires. Based on recommendations from the teacher and an evaluator, the package is undergoing revision and is being continued in the testing cycle.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:	1 set per 6 students	Not determined		
3 student books, *A Special Place*				
3 student activity books				
3 sets of artist's idea packs (3 card decks in each set)				
3 sets of artist's planning puzzles (2 in each set)				
1 shape bag				
1 pad student response sheets (30 in each pad)			Consumable yearly	
Teacher materials:		Not determined		
1 artists' interview tape				
1 filmstrip				
1 teacher's guide				

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Jerilynn Kupferberg, Product Developer

AVAILABILITY

The anticipated completion of *The Visual Artist* is November 1975. The package is copyrighted. It will be available from the distributor:

CEMREL, Inc.
3120 59th St.
St. Louis, Mo. 63139

Black
&Whit
Planning B
The Visual Artist
A Special Place
Color
Planning Box

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 023

WRITERS: POETS, STORYTELLERS, AND PLAYWRIGHTS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A set of instructional materials which introduces 5th- and 6th-grade students to three different kinds of writers

This set of instructional materials, one of the Aesthetics and the Artist group of the *Five Sense Store* packages, introduces students to three different kinds of writers—poets, storytellers, and playwrights. The purpose of the materials is to develop the students' knowledge of the creative process through a study of the writers' relationship to their works. The materials are not intended to train students to be writers, although such training is a natural outgrowth of working with these materials, which include a creative writing file box. The students' understanding of the creative process is made more realistic as they work on their own short pieces of prose, poetry, and drama.

The materials involve students in various kinds of learning experiences. Students meet several writers via a student book, slide-tape presentations, recorded interviews, and printed interviews. They learn about these writers' interests, experiences, and attitudes.

The students see that writers, talented though they may be, are individuals involved with human, as well as artistic, concerns and that some of these concerns affect how the writers create and what they produce. Further, as students read the writers' works, they learn that the finished pieces of writing do not miraculously appear on the page, but are the result of the fascinating and sometimes frustrating creative process. In discussion, the students perceive and describe this creative process as it has actually shaped the finished piece of prose, poetry, or drama. They read comments and pieces by other writers working in the same form and see that the process varies, though each writer uses the same tools—words. They are introduced to some technical terms, such as "characterization" and "conflict," and perceive that the writers manipulate these elements according to their own needs.

During the final portion of each lesson, when the students try to express their own ideas in writing, they experience firsthand the challenge and excitement of the creative process. In the final activity, students produce books of their own writings or create together a group book of their writings.

Sample Lesson

(Addressed to Teacher)

Lesson 3: Sources of Some Playwright's Ideas

General Description: In this activity, the students learn how three playwrights conceived ideas for plays. They then try to use the method by which one playwright used to start writing.

Procedure: Tell the students that, of course, not every writer works in the same way and that they will read how three famous playwrights got started. Direct the students to the pictures and short biographies of the playwrights.

Reading and Discussing Comments by Playwrights: As the students read the short commentaries, encourage them to consider the playwrights' words carefully. Does any part of any story surprise them? Are they surprised, for instance, that Brown originally wrote his play as a poem? Have they read any poem in this book that might be turned into a play? (Peri Dwyer's *Compliance* suggests itself, since it described the situation that the poem depicts.)

Creative Writing Activity: Read with the class the following directions:

(Addressed to Students)

Now you try it. Think of a person whom you might write a play about. Choose someone you like to think about, someone you find interesting or curious. To create a story-idea, think of the most improbable or unlikely thing this person might do, just as Joseph Kisserling did in creating *Arsenic and Old Lace*. Don't try to write the whole play now. Choose the character and make up the story-idea first. That's how playwrights begin their plays.

SUBJECT AREA(S)

Aesthetics and the Artist: Literature.

Introduction of three different kinds of writers—poets, storytellers, playwrights; how human, as well as artistic, concerns of the writer affect what is created and produced; fascination and frustration of the creative writing process; introduction of the terms "characterization" and "conflict" and the way individual writers manipulate these elements; and actual process of creative writing by students.

INTENDED USERS AND BENEFICIARIES

This instructional package is being designed and formally tested with 5th- and 6th-grade students. It can easily be used with 8th- and 9th-grade students as well.

GOAL(S) OR PURPOSE(S)

The goals of *Writers: Poets, Storytellers, and Playwrights* are for students: (1) To perceive the writer as an individual with everyday human, as well as artistic, concerns; (2) to perceive how the creative process works, and the relationship of an individual writer's work; (3) to perceive that the creative process varies from writer to writer; (4) to perceive that different writers get very different ideas from the same sources; (5) to acquire the necessary critical insight into the creative process and language for such analysis and judgment that they are able to analyze and judge literary works; (6) to break down stereotypes in students' minds about writers; and (7) to produce their own pieces of writing, thus intensifying their understanding of the creative process.

PATTERNS OF USE

Writers: Poets, Storytellers, and Playwrights is a self-contained instructional package. It may be used as part of an ongoing curriculum in literature; linked with other Aesthetic Education Program units which are related to music, art, dance, and drama and which are clustered around "Aesthetics and the Artist"; or used with creative writing programs.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

Writers: Poets, Storytellers, and Playwrights takes about 22 hours to complete. The 16 activities take from 30 minutes to 3 hours to complete and can be broken down into smaller class sessions.

IMPLEMENTATION PROCEDURES

Writers: Poets, Storytellers, and Playwrights does not require a specialist teacher. It is being tested with 5th- and 6th-grade students, but it can be used with students in 7th, 8th, and 9th grades as well.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

At this point, the materials have received a preliminary (hothouse) evaluation based upon daily observation of trial in one classroom. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from hothouse trial suggests that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide. The materials are being revised in preparation for pilot trial.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on utilization of the published version of the packages on a yearly basis.

At this time, only the hothouse trial has been completed. Information received as a result of this trial has confirmed that this package merits continued development. Necessary revisions are being made, and the package will be advanced to pilot trial.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:	*	*	Publication format sheets replaceable yearly	
Student activity book				
Package library of specific readings				
Publication format sheets				
Teacher materials:				
Sound filmstrip				
Cassette tapes		*		
Teacher's guide				

*Materials are still in prototype stage. Packaging and cost decisions have not yet been made.

DEVELOPER/AUTHOR:

CEMREL, Inc.
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Benett Tarleton, Product Developer

AVAILABILITY

The anticipated completion date of *Writers: Poets, Storytellers, and Playwrights* is November 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

ANALYZING CHARACTERIZATION (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package designed to help students in grades K-4 verbalize more descriptively their perceptions regarding people

Analyzing Characterization (part of the Aesthetics and the Creative Process group of the *Five Sense Store*) helps students to verbalize their perceptions more descriptively with regard to people and to realize that graphic depictions of real people can also be applied to fictional people. This ability makes stories and plays more enjoyable and appealing.

The students apply words which classify attributes of characterization in terms of sex, age, role or occupation, actions, speech, and feeling to the stimuli supplied in the package (photographs, oral statements, reading passages) and to their own creative products (drawings, improvisations, writings, and storytellings). It is hoped that by working with characterization in a number of disciplines, the students will observe that the ability to handle perceptions of this sort leads to greater understanding of people and characters within the spectrum of the environment and the various arts.

Sample Lesson

(Addressed to Teachers)

Lesson 1

Concept—With words we indicate perceptions such as sex, age, role, actions, speech, and feelings regarding a person.

Objective—The students will become familiar with some typical characterization words and being to recognize them. In this lesson they will work with person words (or nouns).

Procedure—Distribute the student booklet *People Are, People Do, People Feel*. Use the pages beginning "Do you know these person words?" (page 10) as the basis for a class discussion. Add your own questions to those given below. Because you know the children well, you will be able to personalize the questions.

1. "Do you know a policeman, a mother, a friend?"
2. "Has a fireman ever come to your house or to your school?"
3. "What is a friend like?"
4. "Do you know a woman who is a doctor?"
5. "Can a person be more than one thing at the same time—a doctor and a father, or a brother and a boy and a friend?"

After the students have begun to answer the questions, give a deck of person cards to each student. Tell the students that the words on the cards are the same person words listed on page 10 of their books. These words are also listed here as follows:

man
woman
boy
girl
father
mother
grandfather
grandmother
brother
sister
friend
neighbor
policeman
fireman
doctor
teacher
astronaut
janitor
waitress
salesman

Select a word, write it on the chalkboard, and ask a student to give impressions of the word. Elicit the students' impressions with questions such as these:

"Can a teacher be a mother?"

"How is a man different from a neighbor?"

"How is a brother different from a friend?"

Since this is not a vocabulary lesson per se, strive for general understanding of the word rather than a dictionary definition. Move quickly through several words.

Focus the attention of the class on the words as used in relation to real or imaginary people. Try to help the students become aware of a person being many things at one time.

Now have the children draw pictures to illustrate their person words. Have them follow the directions in their booklets. These directions are also listed here as follows:

Choose a person word.
Do not tell anyone what your person word is.
Write your person word on one side of your drawing paper.
Draw a person picture on the other side.
Make a person larger than everything else.
Make the person more colorful than everything else.

Draw things the person might use.
You may fill your whole drawing sheet.
When you finish your person picture, have your friends guess which person word you chose.

Tell the students that they should make the person indicated by the word they are drawing the most important element in the drawing by putting things the person might use into the drawing, by making the person larger and more colorful than anything else, or by filling the entire drawing paper with the face of the person word (drawing a portrait of the person).

After the drawing period, ask several students to share their drawings with their classmates by holding up their pictures. The other students should guess which word has been drawn. Although some drawings may be obvious (doctor, teacher, fireman), others may produce several correct responses. Discuss with the students whether one word is a better label than another for what is characterized in the drawing. If possible, put all the drawings on display in the classroom.

SUBJECT AREA(S)

Aesthetics and the Creative Process pertaining to language arts/literature is the subject area.

Words are a means of classifying and interpreting perceptions regarding people. Human characteristics as identified in photographs may be expressed by means of specific words. Some words are more specific and descriptive than others. Literature is not created only by professional writers; literature may be created by a child using words to convey thoughts and feelings about self and other people.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for 2d-grade students, *Analyzing Characterization* can be used successfully with 3d and 4th graders.

GOAL(S) OR PURPOSE(S)

The purposes of this package are: (1) To introduce students to characterization as a phenomenon in the environment and the arts; (2) to expose students to the properties of a character's sex, age, role or occupation, actions, speech, and feelings; and (3) to help students transfer their perceptions of character from one artistic medium to others.

PATTERNS OF USE

Analyzing Characterization is a self-contained package with sequential and cumulative activities. It may be used as part of an ongoing curriculum in literature or language arts; linked with other AEP materials in the Aesthetics and the Creative Process group; combined with other AEP packages relating to character study, creative writing, or literature; and used with traditional English programs in teaching grammar and composition.

ASSESSMENT PROVISIONS

While there are no formal tests, learning is assessed by teacher and student. The first and last activities can be used as pretests and posttests. Guidelines for assessing student performance and oral response are built into the package.

TIME REQUIREMENTS

Analyzing Characterization requires approximately 10 to 15 hours to complete, depending on class size and the utilization of suggested optional and followup activities. There are 11 distinct activities, each requiring from 30 to 45 minutes.

IMPLEMENTATION PROCEDURES

Analyzing Characterization does not require a specialist teacher. This package has been tested with 2d-grade students but may be used with older children at the discretion of the teacher or curriculum specialist. The various activities in the package require students to work in large groups, in small groups, in pairs, and individually; some of the activities require rearranging the classroom. The improvisation activities will require space for meetings, practice, and performing.

Most of the activities serve as introductions to various artistic experiences; therefore the teacher is encouraged to present the activities in conjunction with regularly scheduled artistic periods. The materials may be used as stimuli for picture making, dramatic improvisation, and storytelling.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6, such as 12-student, 18-student, and 24-student sets with teacher materials. Student materials and teacher materials can be purchased separately. Costs are figured on multiples of the base price per six-student-and-teacher module. The cost for one unit has not yet been determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of varying ethnic and socioeconomic characteristics. The developers have received no reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers monitor a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on a yearly basis.

The pilot evaluation of this package was carried out with 2d-grade students in local schools. Specially constructed tests indicate that students who received package instruction were better able to analyze characterization than those students who were not taught the package. Student and teacher satisfaction with the package was high as measured by post-treatment questionnaires.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials: 6 *People Are, People Do, People Feel* (books) 6 *Queens, Kids and Other People* (books) 6 sets of word cards (58 cards per set)	1 set per 6 students	Not determined		
Teacher materials: 2 cassette tapes 1 teacher's guide				

DEVELOPER/AUTHOR:

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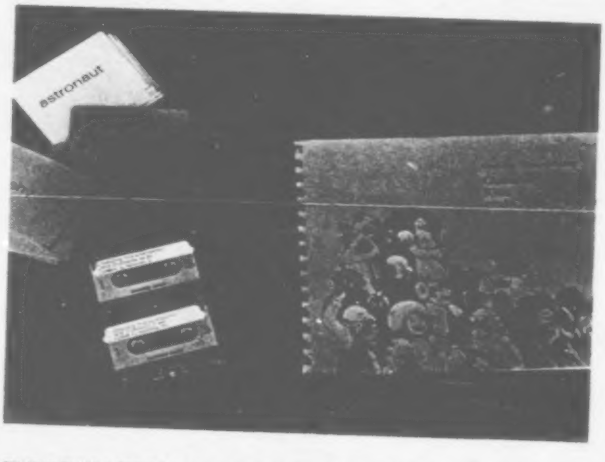
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Bennett Tarleton, Product Developer

AVAILABILITY

The anticipated completion date of *Analyzing Characterization* is late 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 025

ARRANGING SOUNDS WITH MAGNETIC TAPES (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which involves 3d graders and older students in the creative process

Part of the Aesthetics and the Creative Process group of the *Five Sense Store* packages, *Arranging Sounds With Magnetic Tapes* involves students in the creative process as they select and arrange prerecorded sounds. Students juxtapose sounds of different rhythms and tone colors, such as squealing pigs, hilarious laughter, or sonic pings, and manipulate their durations. An introductory tape explains and illustrates simple arranging with taped sounds. A library of 20 taped sounds, a splicing block with attached takeup reel and scissors, a set of student direction cards, and graphically illustrated charts are the students' tools. As they arrange selections from the sound library, students discover how to use time, sound quality, and other elements of sounds to produce compositions having unity and balance. As they make decisions about the planning and construction of their sound arrangements, they are involved in the same creative process experienced by the arts in music and other arts areas.

This package will encourage students: (1) To develop mechanical skills—cutting and splicing—required for working in the medium of taped sounds; (2) to appreciate, through exposure to different and unusual sounds, the wide range of sounds and music in our contemporary society; (3) to experience form through using repetition, duration, and silence in developing a theme; and (4) to become aware of the creative process engaged in by arrangers and composers through selecting and arranging sounds to create a theme and variations.

Sample Lesson

(Addressed to Teachers)

Lesson Four: Creating a Theme and Variations

Concept: An awareness of the creative process engaged in by the arranger-composer can be gained by selecting and arranging sounds to create a theme and variations.

General Objective of the Lesson: The students will add yet another dimension to their arrangements by varying the order, as well as the duration, of three selected sounds.

By now the process of developing a theme by repeating three or four selected sounds should be familiar. In this lesson students are asked to repeat selected sounds in combinations and with variations they choose. In other words, they will be creating a theme and variations.

Listening time for the arrangements may be scheduled at your discretion. If the students seem eager to hear their works, you might schedule a listening period immediately after the teams have completed the splicing process. The maximum time for each arrangement will be 3 minutes (20 sounds, 9 seconds each), and most will probably be 2 minutes or less. Therefore the listening time will not be extensive.

Now distribute Sound-Action Card I to your students and let them proceed with the lesson.

(Addressed to Students)

Sound-Action Card I

This time arrange a three-sound theme. Do everything you did for Sound-Action Card F and add one more step: Change the order of the sounds in your theme each time you repeat it. By changing the order as well as the length of the sounds, you will be creating a theme and variations.

Variations are new forms of a theme. Repeat your theme and variations until your holding board is filled. Remember to think carefully about how the sounds sound. Talk it over with your teammates before choosing your sounds. Write your arrangement out on your holding board. Cut and splice it as you did before.

Choose a title for your arrangement that describes what it is like. Then introduce and play your arrangement for the other teams and listen to their arrangements. Describe the feeling you wanted to give with your original theme. Did changing the order of the sounds in your theme change the feeling your theme gave? If it did, describe the feeling that the variations on your theme gave to you. Ask your classmates how they felt about your theme and variations.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Music

Proficiency in the mechanics of cutting and splicing tape, exposure to different and unusual sounds in order to enhance student appreciation of the wide range of sounds and music in contemporary society, selection and arrangement of sounds to create a theme and variations, decisionmaking about the aesthetic quality of sound-tape arrangements.

INTENDED USERS AND BENEFICIARIES

Although *Arranging Sounds With Magnetic Tapes* was formally tested at the 3d-grade level, it has been used successfully with 3d-grade students to juniors in high school. It has also been used with adult groups.

GOAL(S) OR PURPOSE(S)

The primary purpose of this package is: (1) To let students encounter the creative process through the selection and arrangement of sounds to gain an awareness of the arranger-composer's art and (2) to expose students to different and unusual sounds so that they can better appreciate the wide range of sounds and music in our culture.

PATTERNS OF USE

Arranging Sounds With Magnetic Tapes is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with the other music-based packages developed by the Aesthetic Education Program to create a curriculum; or used with other AEP packages which are related to art, dance, theater, and literature and which are clustered around Aesthetics and the Creative Process.

ASSESSMENT PROVISIONS

While there is no formal testing, learning is assessed by the teacher and the students. Student products are examined and analyzed, and the final composition can be used as a posttest of the package. Guidelines for informal evaluation are built into the package.

TIME REQUIREMENTS

Arranging Sounds With Magnetic Tapes takes approximately 11 hours to complete. The activities are done in time periods of 45 to 60 minutes.

IMPLEMENTATION PROCEDURES

Arranging Sounds With Magnetic Tapes does not require a specialist teacher. It is most effective when an entire class or as many students as possible use the materials simultaneously. Although the students work in teams of three, the reaction of the three-student teams to one another's arrangements is a very important part of the package. The teacher's guide outlines all procedures for the teacher and has been rated as useful in field trials.

The teacher is encouraged to have the students move into independent experimentation with tape composition.

Field reports indicate that the materials stand up well with repeated classroom use. Consumables are minimal and can be purchased from the publisher.

Summary Cost Information

This package can be purchased in sets of varying multiples of 6, e.g., 12-student, 18-student, or 24-student sets. Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, four, or five student sets. Cost for one complete set containing enough materials for one teacher and six students is $255.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

The pilot evaluation of this package was carried out with 3d-grade students in local schools. Teachers reported that students were able to master such technical skills as splicing, delighted in engaging in the creative process of arranging sounds, and appeared to be more aware of sounds in their environment. Both teachers and students indicated a high degree of satisfaction with the materials, as indicated by postpackage attitude measures.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials: 2 holding boards 2 rolls, blank tape 100 sheets, editabs (90 per sheet) 2 splicing blocks 2 rolls, masking tape 2 grease pencils 2 sets, sound-action cards (12 cards per set)	1 set per 6 students	92.50*	Blank tape, editabs, masking tape, and Sound Library tapes consumable yearly	
Teacher materials: 1 sound library board 1 set, sound library tapes (20 per set) 1 Information-narration tape 1 set of charts (3 per set) 1 teacher's guide		162.50*		

*Price subject to change.

DEVELOPER/AUTHOR:

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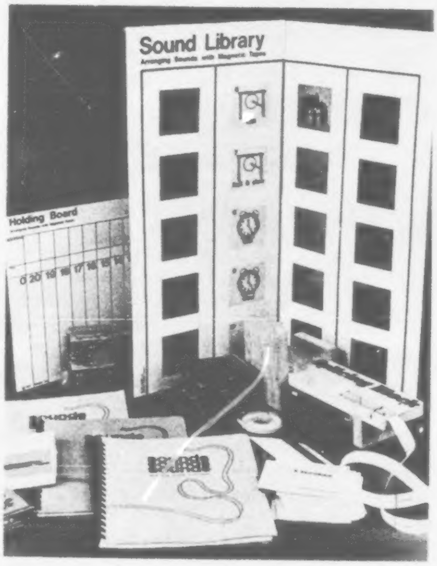
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Ed Sweda, Product Developer

AVAILABILITY

Arranging Sounds With Magnetic Tapes **was copyrighted in 1973, and copyright is claimed until 1981. It will be available as of spring 1975 from the publisher/distributor:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 026

CONSTRUCTING DRAMATIC PLOT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A series of games in which 3d-grade students begin to see how a playwright achieves unity in a play

A part of the third series of the *Five Sense Store* packages, Aesthetics and the Creative Process, *Constructing Dramatic Plot* is designed as a series of three games, each posing specific problems. By selecting and arranging the elements of dramatic plot structure—characters, setting, incidents, conflict, crisis, and resolution—the students solve the problems and begin to see how a playwright uses these elements to achieve unity in a play and how heightened interest in the audience is created. Colorful game boards and rule sheets for each of the three games are used with card decks presenting specific examples of each of the elements. An incident card might read "Someone surprises someone else (how?)," and a student incorporates this into a plot about, for example, a birthday party. Diagnostic activities precede the games and can be used to guide students to the most appropriate beginning game level. Groups of three students play the games together.

This package will encourage students to use card decks to select characters and setting and to link a series of incidents to create a simple but logical story (game 1); to use card decks to create a simple but logical story with characters, setting, a conflict, and incidents (game 2); to use card decks to create a simple but logical plot with characters, a setting, conflict, incidents, a crisis, and a resolution (game 3); and to act out their dramatic plots.

Sample Lesson

(Addressed to Teachers)

GAME 1

Concepts: A dramatic plot begins to be developed by linking a series of incidents. A dramatic story includes characters and a setting.

Objectives: The student will use a card deck to select characters and a setting for a dramatic story. The student will use a card deck to select and link a series of incidents to create a simple but logical story.

GAME 1: RULES (addressed to students)

Aim of the game.

This is a game in which the players work together to make up the best possible dramatic story. You will use character-setting cards, incident cards, and imagination cards to make up your story. All the cards must make sense together.

1. One, two, or three may play.
2. Set up the game board with the character-setting card deck, incident card deck, and the imagination card deck.
3. Choose any one of the character-setting cards for your story from the character-setting card deck. All players must agree on the card. Put the card face up on the top of the deck.
4. Decide who goes first, second, and third.
5. Player 1 chooses any one of the incident cards to start the story. Place the incident card on the first space on the game strip. All the players must agree with the choice.
6. Player 2 does the same, but places his incident card on the next blank space on the game strip. All the players must agree with the choice.
7. Player 3 does the same thing. All the players must agree with the choice.

Special Rules:

1. The incidents in the story must make sense together.
2. The incidents must make sense with the characters and setting.
3. All the players must agree that the incidents, characters, and setting make sense together.
4. If you cannot make an incident card fit into the story, you may use an imagination card and make up your own incident.
5. When you have finished a story, show it to your teacher and answer these questions:

Who are the characters in your story?
What is the setting for your story?
What are the incidents in your story?
If your answers are correct, your teacher will tell you what game to play next.

AESTHETIC EDUCATION

RD 010 026

SUBJECT AREA(S)

Aesthetics and the Creative Process: Theater arts.

Introduction of the term "dramatic plot" and how it functions in a dramatic structure; process of selecting and arranging the elements of dramatic plot—incidents, setting, characters, conflict, crisis, and resolution—into a story.

INTENDED USERS AND BENEFICIARIES

Constructing Dramatic Plot was tested with third graders but may be used with older or younger students at the discretion of the teacher.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are: (1) To lead students to an understanding of dramatic plot structure by having them manipulate the elements of dramatic plot in the development of their own plots, and (2) to begin to see how a playwright uses these elements to achieve unity in a play and create heightened interest in the audience.

PATTERNS OF USE

Constructing Dramatic Plot is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other AEP packages which are related to music, art, dance, and literature and which are clustered around "Aesthetics and the Creative Process"; and used with language arts programs.

ASSESSMENT PROVISIONS

A student progress chart can be used as a guide for establishing a recordkeeping system for students' work. Two diagnostic activities are included with the materials and are suggested for pre- and post-instruction. Throughout the activities the student-learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the teacher's guide.

TIME REQUIREMENTS

The activities in *Constructing Dramatic Plot* take from 10 to 15 hours of actual playing time to complete.

IMPLEMENTATION PROCEDURES

Constructing Dramatic Plot does not require a specialist teacher. The package may be handled as a group activity, or students may progress through the games at their own pace on a small-group basis. Diagnostic activities can best be administered on a group basis (3 students minimum). Students will need more space than the conventional desktop. An area approximately 8 by 8 feet would be sufficient. The teacher's guide outlines all procedures for the teacher and has been rated as quite useful in field trials.

The teacher is encouraged to relate the activities in this package to examples of dramatic plot in professional plays, TV programs, films, cartoons, new articles, and real-life events in school and the community.

Field reports indicate that the materials stand up well with repeated use in the classroom.

Summary Cost Information

Packages can be purchased in varying multiples of 6-student sets; for example, 12-student, 18-student, 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $60.00.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

The information gathered from pilot trial of the materials and subsequent use in 41 States indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented without additional aid beyond that given in the teacher's guide. The developers and publishers have not received any reports of harm associated with the use of this product.

Packages are carefully scrutinized to eliminate any f[illegible] of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the package causes an appropriately directed review of the materials by a qualified person from outside of the program. The materials are revised to eliminate such shortcomings.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States, using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program.

Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the package on a yearly basis.

The prepublication evaluation of this package was carried out with students in grades 2, 3, and 4 in local schools. A specifically constructed test indicated that students who received package instruction were better able to construct a dramatic plot than students who were not taught the package.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:	1 set per 6 students	45.00*	Diagnostic activity sheets consumable yearly	
2 sets of 3 game boards 2 sets of rule sheets for each game 2 boxes of game cards (145 cards in each box) 60 diagnostic activity sheets				
Teacher materials: Teacher's guide (24 pp.) Set of 21 sample plot cards		15.00*		

*Price subject to change.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Sharon Bocklage, Editorial Coordinator
Bernard S. Rosenblatt, Associate Director and Product Developer

AVAILABILITY

Constructing Dramatic Plot was copyrighted in 1973 and copyright is claimed until 1981. It is currently available from:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

Constructing Dramatic Plot
Constructing Dramatic Plot
Plot: Game
Plot: Game
Plot: Game

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 027

CREATING CHARACTERIZATION (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package used primarily with 3d graders which deals with the physical and vocal expression of emotion in the theater

The Aesthetics and the Creative Process series of the Aesthetic Education Program (AEP) includes this instructional package, which deals with the physical and vocal expression of emotion in a theatrical characterization. The primary student uses a broad range of instructional materials—photographs showing physical expression of emotions, a puzzle that can be put together in a variety of ways to show a single emotion, masks, a filmstrip, and a recording presenting vocal expression of emotion. These materials stimulate exploration and activity that allows students to synthesize an emotional characteristic with their own voices and bodies. The improvisations are evaluated by fellow students, always with emphasis on the discoveries taking place rather than on the presentation of a polished performance. A satellite lesson explores the characterization problem with color or texture as ways to express an emotion theatrically.

This package will encourage students to look at the pictures in the emotion book and discuss how the emotion in each picture is expressed nonvocally; to arrange characterization picture composites to demonstrate that they have learned that character emotions can be expressed by the face, arms/hands, and legs/feet, as well as by the whole body; to imitate the picture composite they have arranged; to select an Emo mask and attempt to express its emotional trait through use of body movement and voice, both separately and in combination; to attempt to create a voice and movements for either an angry, a fearful, or a happy character and to present a group improvision; and to select a color and a texture and attempt to express related emotional traits.

Sample Lesson

(Addressed to Teachers)

This lesson familiarizes the student with the word "emotion," encourages conscious thinking about the range of emotions, and helps discovery of how a character's emotional traits can be expressed nonvocally (physically).

The emotion book contains photographs of different people expressing emotions physically. The first photographs emphasize emotional expressions on the face, then expression of emotion by the arms/hands, legs/feet, and, finally, full-figure views show emotional expression by the whole body. The student will gain some understanding of nonvocal emotional expression through a discussion of each picture with the teacher.

There are no "correct" answers in the student's response. Two students looking at the same picture may interpret the same nonvocal cues differently. This is all right as long as the students attempt to explain their decisions. Expecting "correct" answers may force a stereotyping and lead students to read the cues as they think they should be read, rather than to explore individual perceptions. You may wish to discuss this difference in perception as an interesting phenomenon.

The emotion word list is provided as a resource to indicate a range of vocabulary to aid in the discrimination of emotion description. It is realized that the list is not definitive; students may wish to add words. It is also realized that some words are not commonly used in all of the lower primary. It is hoped that the list will help to increase descriptive vocabulary of emotional characteristics and that the teacher will use as many of these words as possible that are appropriate to a specific class.

In the review, it should be reinforced that various parts of a person can express an emotion and that by putting parts together, the "whole person" can express an emotion. Each student should understand the concept of the lesson. Discussion about nonvocal cues around the school and the home might be desirable. Students may be able to imitate how the teacher or their parents express emotions without talking.

SUBJECT AREA(S)

The purpose of this instructional package is to enable students: (1) To know that there are different modes of nonvocal and vocal expression of emotions; (2) to know that the portrayal of emotion in a theatrical context is a deliberate decisionmaking process; (3) to perceive and describe the relationship between the voice, the movement, and the emotions of a character as expressed by the actor; and (4) to synthesize elements of characterization and create simple characterizations within improvisations.

PATTERNS OF USE

Creating Characterization is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other "theater-based" units developed by the Aesthetic Education Program to create a curriculum; linked with other AEP units which are related to music, art, dance, and literature and which are clustered around Aesthetics and the Creative Process; and used with Language Arts Programs.

ASSESSMENT PROVISIONS

Learning is assessed by the teacher and by the students. Students take a pretest which can also be administered as a posttest. The teacher is provided with observational "clues" as well as questions to assess learning for each activity. Teacher and student evaluation sheets, as well as guidelines to interpret them, are provided to assess the final improvisations performed by the students.

TIME REQUIREMENTS

Creating Characterization takes approximately 10 hours to complete depending on class size and utilization of suggested "additional activities." Teachers generally take about 45 minutes per day, 2 to 3 days per week.

IMPLEMENTATION PROCEDURES

Creating Characterization does not require a specialist teacher. This instructional unit has been tested with students in the 3d grade, but may be used with younger or older students at the discretion of the teacher or curriculum specialist. It is recommended that *Creating Characterization* be taught in small groups to enhance interaction and to allow the teacher to respond specifically to each student. Students will require more space than a small desk; they will need room to spread out their materials so that they will not conflict with others. The teacher's guide outlines all procedures for the teacher and has been rated as quite useful in field trials.

The teacher is encouraged to relate the activities to theatrical experiences by having the students analyze television programs and attend "live" theater performances, and by bringing theater artists into the classroom.

Field reports indicate that the materials stand up well with repeated use in the classroom. Consumables are minimal and can be purchased from the publisher.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6, e.g., 12-student, 18-student, 24-student sets, with teacher materials. Student materials and teacher materials can be purchased separately. Costs are figured on multiples of the base price per six-student and teacher module—cost for one unit containing enough materials for the teacher and six students is $85.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction; workshops are offered by the publisher and the laboratory as well as curriculum consultation by the laboratory. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on a yearly basis.

RD 010 027

The prepublication evaluation of this unit was carried out with 3d-grade students in local schools. Specially constructed tests regarding the basic goals of the package compared students taking the package to other students. The results showed that students exposed to the unit were significantly superior in understanding important aspects of theatrical character development. Student and teacher satisfaction with the materials was also high, as measured by a posttreatment attitude scale.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials including books, puzzles, masks, texture samples, pretest and posttest sheets, and student evaluation sheets	1 set per 6 students	52.50*	Test and evaluation sheets consumable yearly	
Teacher materials including guide, filmstrip, record, theatrical gels, emotion cards, wall chart, and evaluation sheets		32.50*		

*Price subject to change.

DEVELOPER/AUTHOR:

CEMREL, Inc.
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3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Sharon Bocklage, Editorial Coordinator
Bernard S. Rosenblatt, Associate Director and Product Developer

AVAILABILITY

Creating Characterization **carries a 1973 copyright date, and copyright is claimed until 1981. It is currently available from the publisher:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

Creating Characterization
Emotion Book

INFORMATION CURRENT AS OF MARCH 1975 ■

CREATING WITH SOUNDS AND IMAGES (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which helps students in grades 3-4 to become aware of various means of communication

This package, part of the Aesthetics and the Creative Process group of the *Five Sense Store*, helps students become aware of various means of communication. Through the use of drawings, photographs, and slides, students learn how images communicate without the use of words. This concept is expanded as the images are matched with sounds. Students explore the importance of sequencing images and sounds by creating part or all of an image sequence. Further, they create their own images, sounds, and narration to make a total presentation.

This package encourages students to participate in our image- and sound-laden society with greater awareness of image/sound communication, to evaluate the effectiveness of communications, and to communicate their own thoughts and feelings with images and sounds.

Sample Lesson

(Addressed to Teachers)

Lesson 3

General Description: The students learn the meaning of the word "image." Then they examine a set of photographs to find images that convey specific images.

Procedure: Divide the students into small groups and give each group a set of photographs that are provided in the package.

Explain that you will give them some problems which they will solve by selecting photographs. Begin with one problem as an example:

"Find an image that shows a sad person. Look through your photographs and find one that shows someone looking very sad."

The students may not all choose the same photograph as the solution to a particular problem. Do not say that there is any one correct answer, but do ask the students to give a reason for their selections. Say, "What is it about that person that looks sad to you, Luther? Do you agree, Maria? Did you pick the same image?"

Start the students on the problems having the most concrete solutions. Only when the students seem to have thoroughly grasped the idea should you move into those areas with less concrete and less familiar solutions. Here are a number of problems you can use. You may think of some others you like and feel are suited to your class.

Find an image that shows you how to make something.
Find an image in which someone is angry, happy, or sad.
Find an image that tells you how something is put together. How can you tell?
Find an image that shows something you might see in a dream.
Find an image that makes you feel sad, happy, angry. What shows you that?
Find an image that shows you something very exciting. Why do you think that's exciting?

It is important that your students give reasons why they identify certain images as being sad, happy, angry, or building something. It is not so important that everyone agrees with the particular reasons.

Finish the activity by asking the students what they discovered from solving the problems you gave them. They should say (in their own words) that images communicate and that each of the pictures told them something. If none of the students says this, or if there does not seem to be a general understanding of the concept, be very specific in pointing it out. You might say, "This picture tells us . . . this image shows . . . in a way different from words, that we get messages from images, messages about things that are not right in front of us.".

SUBJECT AREA(S)

Aesthetics and the Creative Process: Visual arts, music, communications, and language arts.

Images and sounds communicate. A sequence of images and sounds can present a more extensive communication than a single image or sound. The meaning of a single image changes when it becomes part of a sequence or when there is a change in the order of images within a sequence.

RD 010 028

INTENDED USERS AND BENEFICIARIES

Creating With Sounds and Images has been tested with 2d- and 3d-grade children, but beginning 2d-graders found the package difficult to master. The materials work best with 3d- and 4th-graders and older children.

GOAL(S) OR PURPOSE(S)

The purposes of this set of materials are to teach students that images and sounds communicate, that more complex and detailed communications require a number of images and sounds, that the meaning of a sequence changes if there is a change in the order of its images, that timing plays an important part in putting images and sounds together, and that there are many elements involved in communicating with images and sounds.

PATTERNS OF USE

Creating With Sounds and Images is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an elementary art curriculum, a language arts curriculum, or a communications curriculum; linked with other Aesthetic Education Program (AEP) packages in the Aesthetics and the Creative Process group, especially the *Constructing Dramatic Plot* package; and used to develop group process skills.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package. Storyboard response sheets provide a structure for assessment of student work, and the package's culminating activity provides a setting for the assessment of overall effectiveness.

TIME REQUIREMENTS

Creating With Sounds and Images requires approximately 15 hours to complete, depending on class size and utilization of suggested additional activities. Daily allotted time varies from 15 to 45 minutes per activity. The package takes about 25 days to complete.

IMPLEMENTATION PROCEDURES

Creating With Sounds and Images does not require a specialist teacher. This package has been tested with students in grades 2 and 3, but may be used with older students. It is recommended that it be taught in small groups to enhance interaction and allow the teacher to respond specifically to each student.

Field reports indicate that the package demands a basic social maturity in the students if the group experiences are to be productive, but on the whole the package was well received and was rated as excellent for its concepts and activities.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, Viking Press, and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

After the pilot trial of the materials, the program continues to gain information on utilization of published materials on a yearly basis.

The prepublication evaluation of this package was carried out with 2d- and 3d-grade students in local schools. Special instruments of measurement were developed to assess the outcomes of instruction with the materials. These instruments revealed that students working with package materials earned significantly higher scores than control group students on measures of technical vocabulary. Students using the package scored significantly higher than others on a performance measure of ability to communicate by using a synthesis of sounds, images, and narration. This information supports a claim of package effectiveness. Student satisfaction with the materials was indicated by their responses to two preference scales. Teacher satisfaction was indicated by responses to an imbedded questionnaire and a terminal questionnaire and interview. Two outside experts reviewed the content of prototype materials and responded favorably.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
24 slide mounts	6 per student	Not determined	Storyboard pads and acetate pads are consumable yearly	
2 pads of acetate for making slides	3 sheets per student			
1 pad of storyboard sheets				
4 sets of Photograph A				
1 set of Photograph B				
10 sets of black and white photographs				
Storycards				
Teacher materials:				
Teacher's guide				
1 sound filmstrip				
1 sound effects tape				
1 music tape				
1 set of abstract slides				
1 set of environment slides				
1 set of animation slides				
1 slide sorter				

DEVELOPER/AUTHOR:

CEMREL, Inc.
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Stanley S. Madeja, Progam Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

AVAILABILITY

The anticipated completion date of *Creating With Sounds and Images* is November 1975. The package is copyrighted. Distributor is to be announced.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 029

CREATING WORD PICTURES (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which encourages students in grades 2-4 to explore the English language as a tool for effective communication

Creating Word Pictures (part of the third series of the *Five Sense Store* packages, Aesthetics and the Creative Process) encourages students to explore the English language as a tool for effective and imaginative communication, both oral and written. Each student has a Word Book which is a comic-book-style guide that explains concepts, directs activities, and reinforces learning. It is used in combination with a diagnostic activity, recording sheets, a set of word cards, a word-card sheet, and the "What is...?" game—materials that allow students to progress at their individual pace.

This package will encourage students: (1) To describe verbally the sensuous connotations of words they select; (2) to manipulate the blue word cards by combining two words to produce specific, original, or humorous images; (3) to recognize that the word picture made by two words can be changed by transposing them; for instance, will describe their senuous perception of both word pictures through written or verbal means, and by making related drawings; (4) to create their own word pictures with the word cards; (5) to select words to find various answers that correspond to the sensuous properties of the definitions given on the "What is...?" game cards; (6) to manipulate word cards, changing the subject to effect major changes in their word pictures and changing verbs and modifiers to make minor changes; and (7) to demonstrate that they can use words creatively to communicate thoughts effectively by using the word cards to construct complete thoughts and sentences, by discussing the sensuous properties of the words they use, and by experimenting with word combinations until reaching one they find acceptable.

Sample Lesson

(Addressed to Teachers)

Activity 9

Concept—Words are symbols that are used to communicate ideas.

Objectives—Students will demonstrate that they can use words creatively to communicate thoughts effectively by: (1) Using the word cards to construct complete thought, (2) using the word cards to construct complete sentences, (3) discussing the sensuous properties of the words used, and (4) experimenting with word combinations until reaching one that is acceptable.

Encourage students to keep a written record of their work. (Successful examples of each numbered objective listed above follow.) To evaluate the students' work, be familiar with the guidelines below and with the general criteria on pages 9-12. In observing their work, in talking with them about their work, and in reading what they produce, emphasize specificity and originality to the students.

1. The students should be encouraged to construct complete thoughts. Students should be allowed to use the words that they "need" even though the words do not appear on any of the word cards. At the same time, they should be aware of the possibilities and flexibility of the words already included.

Allow the students as much time as they need to complete their work. For example, one student worked for 30 minutes and wrote one statement: "flower I love you."

2. The student should begin to use sentences to express a thing. Building clauses and phrases can be a preliminary necessity and is a verbal activity in itself.

Crawl like a spinning jump; a gallop in the winter like a jump; ancient will happen; sleepy in the day will frighten you.

Although these are not complete statements, they do indicate a probing and a discovery. (Examples: I "Cam" ancient; ugly black winter; and black lady is weak; when I come; is rusty weak black sleep alone.)

3. The student should be able to discuss with the teacher and classmates the sensuous properties determined through a choice of words. Example:

Once an old empty ancient submarine ship was quiet and rusty in Germany. Inside the ancient submarine ship "was" a million sticky spiders. An old sleepy Indian spider. He thought it was a nice home. Because it was quiet. He liked quiet places. Because he was very very old. He was so sleepy he went back to sleep. The old empty ancient submarine was "know" again quiet.

4. The student should experiment with possibilities of arrangement. Examples of student combinations:

An elephant and I laugh in the closet.
An old elephant and I laugh and crawl in the closet.
The old electric bridge will come and go.
The old electric bridge will come in winter and go in spring.

SUBJECT AREA(S)

Aesthetics and the Creative Process including communication arts/literature is the subject area.

Words are symbols that can be used to communicate sensuous characteristics and ideas. Precise images or thoughts can be communicated by carefully choosing and arranging words, and altering words used as modifiers will alter the sensuous perception of the thing that they modify.

INTENDED USERS AND BENEFICIARIES

Creating Word Pictures is designed for 2d-, 3d-, and 4th-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instruction package is to enable students to increase their ability to communicate effectively and imaginatively in the English language, both orally and written by means of creating novel word combinations, describing the connotations of words, and drawing specific and meaningful analogies.

PATTERNS OF USE

Creating Word Pictures is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in literature; linked with other AEP units relating to music, art, dance, and drama in the "Aesthetics and the Creative Process"; or used with language arts programs.

ASSESSMENT PROVISIONS

Guidelines for informal assessment procedures are provided in the teacher's guide. The relevant criteria for evaluating a particular activity are listed in the notes for the activity. As each student moves through an activity, progress is recorded on a "Record of Activities" sheet. A diagnostic pretest activity is provided to find the entrance level of competency of each student.

TIME REQUIREMENTS

Creating Word Pictures takes approximately 9 hours to complete, depending upon the number of students a teacher has and whether students are divided into groups when working with the package. The various activities within the package require from 15 to 45 minutes.

IMPLEMENTATION PROCEDURES

Creating Word Pictures does not require a specialist teacher. This instructional package has been tested with students in the 2d, 3d, and 4th grades but may be used with older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The teacher may instruct the whole group on what to do and then allow smaller groups of three students to work at various times, or the teacher may set aside a specific time in which the whole group will work on the instructions and activities. Individual students or small groups could work independently with the materials and proceed at their own pace.

The teacher is encouraged to extend the concepts in this package to the analysis or writing of poetry.

Summary Cost Information

Packages can be purchased in varying multiples of 6, such as 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately so that only one set of teacher materials need be purchased with two, three, four, or five student sets. The cost for one complete unit containing enough materials for one teacher and six students is $59.95.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies discovered as a result of the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the packages on a yearly basis.

The prepublication evaluation of this package was carried out with 3d-grade students in local schools. A specially constructed test indicates that students who received package instruction were better able, to a moderate degree, to write descriptions using a given stimulus than those students who were not taught the package. Student and teacher satisfaction with the package was high as measured by post-treatment questionnaires.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
6 word books	1 set per 6 students	56.00*	Diagnostic activity sheets and worksheets consumable yearly	
2 boxes of word cards				
2 "What is...?" games				
6 word card sheets				
4 pads of diagnostic activity sheets				
6 pads of individual worksheets				
Teacher materials:				
Teacher's guide		3.95*		

*Price subject to change.

DEVELOPER/AUTHOR:

CEMREL, Inc.
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St. Louis, Mo. 63139

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Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rita Perkinson, Product Developer

AVAILABILITY

Creating Word Pictures was copyrighted in 1973, and the copyright is claimed until 1981. Order from:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

Creating Word Pictures
Teacher's Guide
Word Card Sheet

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 030

EXAMINING POINT OF VIEW (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which introduces the conceptual and physical aspects of point of view to 2d graders and older students

The Aesthetics and the Creative Process group of the *Five Sense Store* packages includes this package, which introduces the conceptual and physical aspects of point of view and helps students find and show their own points of view with a camera. Two basic premises of photographic art are presented: First, the artist uses the camera viewfinder as a tool in expressing self; and second, the artist, when manipulating point of view, uses the environment as a content source. The *Point of View* book presents examples of photographic techniques for showing ideas and suggests criteria for judging the expressiveness and the aesthetic quality of a photograph. Students use a range of additional materials, from cutout frame corners to a Polaroid camera, to learn that photography is an artistic vehicle that can be used to present one's own point of view.

This package will encourage students: (1) To form a personal definition of point of view; (2) to express their visual points of view through use of a viewfinder and camera; (3) to delimit subject matter, select view, and create perspectives in their photographs; and (4) to attach personal preference to their photographic decisions—selection, editing, and combination—and discuss their preferences.

Sample Lesson

(Addressed to Teachers)

Lesson 2: The Camera is a Tool to Show Points of View

Concept: The medium of photography can be used to express one's unique point of view.

Objective: The students will become familiar with the basic parts and operations of a camera, and will take practice photographs.

These pages link Section 1, in which students explored various definitions of point of view, to the remainder of the book. Here the camera is presented as a mechanical tool for expressing one's own point of view in photographs.

A short conversation can help students use the book as a tool for investigating photographic expression of point of view. Ask, "Do you think that if each of you had a camera, all of you would take the very same photograph?" Students' answers will build on any of their experiences in defining point of view (for example, the fact that no two students made the same drawing in response to a description of an imaginary thing).

Be sure that the students read through all the "things to remember"—these are common mistakes made by beginning photographers. Then, during some break in the day, take the students outside in a group, or in small groups, and let them take one or two practice photographs. Remind them of the "things to remember" and of the instructions for operating the camera, and help them to build confidence in their picture-taking ability. Check each student to be sure the camera is being correctly operated. Keep a record of which student took which photograph. The easiest way is to jot down the number from the back of the film cartridge next to the student's name.

After you are familiar with the operation of the Polaroid camera, let the students take some Polaroid pictures. Being able to see a picture immediately will help the "things to remember."

If each student takes a photograph of another student, all will have a personal photograph that will demonstrate the "things to remember," as well as provide a photographic identification for their photobook.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Photography.

The several definitions of point of view, all of which are helpful in perceiving and analyzing things and ideas; photography as a medium to express one's unique point of view; process of selecting subject matter from the environment; manipulation and selection of distance, angle, and view; use of different angles, views, distances, and points of view to create photographs; use of photographs to create a photo essay showing one's own point of view.

INTENDED USERS AND BENEFICIARIES

Examining Point of View has been formally tested with students in the 2d-grade. It has been successfully used, however, with students in the 3d to the 7th grade.

RD 010 030

GOAL(S) OR PURPOSE(S)

The major goal is to help students understand two basic premises of photographic art: (1) That the artist uses the viewfinder and camera as expressive instruments for visual statements; and (2) that the artist, through manipulating point of view, draws on the environment as a source for inspiration and expression.

PATTERNS OF USE

Examining Point of View is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in photography; linked with other AEP packages which are related to music, art, dance, literature, and theater and which are clustered around "Aesthetics and the Creative Process"; or used with programs in other disciplines, such as, social studies, to which the concept of *"Point of View"* is applicable.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by analyzing the photographs taken by the students. Guidelines for the analysis are built into the package.

TIME REQUIREMENTS

Examining Point of View requires a minimum of 20 hours to complete, excluding the final photographic essay. Each section requires at least 2 hours to do, but the time periods can be further broken down at the teacher's discretion.

IMPLEMENTATION PROCEDURES

Examining Point of View does not require a specialist teacher. Students work on small-group and individual bases at various times during this package and work both indoors and outdoors. Many of the activities require students to move about, perhaps to get up on a table or down on the floor. In addition, students need freedom to move around the whole classroom. The teacher's guide outlines all procedures and has been rated as quite useful in field trials.

The teacher is encouraged to relate the concepts in this package to other arts areas.

Field reports indicate that the materials stand up well with repeated use. Consumables are easily purchased from the publisher.

Summary Cost Information

Examining Point of View can be purchased in sets of varying multiples of 6, such as, 12-student, 18-student, or 24-student sets. Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, or four student sets. Cost for one complete unit containing enough materials for one teacher and six students is $31.45.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in photography can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revisions, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the packages on a yearly basis.

The pilot evaluation of this package was carried out with 2d-grade students in local schools. Specially constructed tests regarding the basic goals of the package compared students taking the package to untreated students. Treated students taking a photograph of a single subject used a greater variety of points of view after the package than before. They also were able to identify one aspect of point of view significantly better than the untreated students on a matching test. Student satisfaction with the materials was also high, as measured by posttreatment attitude scales. Limited use in the extended pilot studies has confirmed these findings.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
3 *Point of View* (72-page books)	1 set per 6 students	27.50*	Consumable yearly	
1 pad of frame corners (30 in each pad)				
1 pad of activity photographs (30 in each pad)			Consumable yearly	
1 pad of viewfinders (30 in each pad)			Consumable yearly	
Teacher materials:				
Teacher's guide		3.95*		

*Price subject to change.

DEVELOPER/AUTHOR:

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Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Corrdinator
Donna Anderson, Product Developer

AVAILABILITY

***Examining Point of View* was copyrighted in 1973, and copyright is claimed until 1981. It is currently available from the publisher/distributor:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

Examining Point of View
Viewfinder
Activity Photographs
Frame Corners
Examining Point of View
Examining Point of View Teacher's Guide

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 031

FORMING WITH MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package giving 3d graders and older students an opportunity to become familiar with some elements of art form of dance

This package, part of the Aesthetics and the Creative Process group of the *Five Sense Store*, provides the opportunity for students to become familiar with some elements of the art form of dance. A workbook and three project booklets are used to help students understand the concept of forming in its broad sense and in the particular sense of forming with movement. When they have completed these activities, the students should understand the meaning of sequence and be able to perform movement sequences having repetition, contrast, and both repetition and contrast. They should be aware that, like artists, they can have many reasons for forming with movement. They will also understand the concepts of level, direction, and dimension and be able to incorporate these into their movements. When they have completed these activities, they should have a better grasp of the intentions, criteria, and decisionmaking requisite to the creative process and, in this case, to the process of forming with movement.

Sample Lesson

(Addressed to Teachers)

Lesson 2

General Description: The students work with you to establish a safe and constructive management system for the creative movement activities which follow.

Procedure: During this session, point out to the students these three major ideas:

1. "You have control over your body and its movement; so you can do many different and unique movements and you can stop them." Also along this line, "Your body has limitations and you should use good common sense about how far you push it."
2. "Two bodies cannot be in the same space at the same time. Thinking ahead, being careful, and being willing to cooperate will be needed so that we can all work safely and successfully together."
3. "Creative movement activities can be a great deal of fun and very exciting, but they are not the same as playing. They are serious and can be hard work. Many interesting things can happen if the work is done well."

Have the students do the suggested movement activities so that they get used to moving creatively and safely while you maintain the necessary control of the classroom.

Consider establishing some "signals" or "rules" between you and the students as you do starting, stopping, listening, looking, and resting. The cues may be things you already use in the classroom, such as certain words, lights, and clapping hands, and certain noises. This will help to organize and add more fun to the work.

Here are some movement ideas for the students to work with. Give them time to explore and practice the steps of problem solving through movement.

1. "Find how many ways you can move your head, arms, legs, back, whole body."
2. "Find how many shapes you can make with your body. Then move in slow motion from one shape to the other."
3. "Find how many different ways you can move from one place in the room to another place in the room."
4. "Find how many ways you can support your body and still keep moving. Besides on your feet, how else can you move?"

Tell the students to close their eyes (except when moving through space) as they explore. This will help shut out distractions, open the imagination, and encourage concentration on the kinesthetic experience.

Give the students an opportunity to see others' ideas but take care not to make them "perform" prematurely. A nice compromise is this: At the end of each exploration, have half the group sit down and the other half help share what they found. This prevents singling out any one individual and developing self-consciousness. Large groups provide a comfortable anonymity.

Be sure to make the point of no right or wrong way of moving but, rather, a "solution." As the students watch others, tell them to notice that a variety of solutions can be equally good if the movement is clear and controlled.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Dance.

Forming, or the creative process, involves having intentions, establishing criteria, and making aesthetic decisions. All of these elements can be identified in the process of forming with movement.

INTENDED USERS AND BENEFICIARIES

Forming With Movement was designed for use with 3d-grade children but can be used with older children as well.

GOAL(S) OR PURPOSE(S)

The purpose of this package is (1) to help students organize their own method, or structure, for completing a whole work of their own design—in this case, forming with movement; (2) to help students describe and analyze aesthetic decisions in relationship to forming with movement; and (3) to help students learn to make critical judgments about the movement patterns made by individual students and groups of students, these judgments to be based on the student's own aesthetic criteria.

PATTERNS OF USE

Forming With Movement is a self-contained set of materials with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance; linked with other Aesthetic Education Program (AEP) packages related to dance; used with other AEP packages in the Aesthetics and the Creative Process group; and used in the refinement of motor skills and sense perception skills.

ASSESSMENT PROVISIONS

Throughout the unit, student learning is assessed by both the teacher and the students themselves. In the student books, a checklist at the end of each creative task encourages students to evaluate their own work as they proceed through the activities. For the teacher, a series of observation schedules is included as a guide to judging student success with the movement activities. Additional guidelines for assessing other aspects of student performance are found throughout the teacher's guide.

TIME REQUIREMENTS

Forming With Movement takes a minimum of 8 hours to complete and will take longer if the teacher makes use of the additional discussions or repeats some of the activities. The nine activities work best when they are broken into 30- and 40-minute sessions.

IMPLEMENTATION PROCEDURES

Forming With Movement does not require a specialist teacher. The package is designed to be used with large or small groups for students from 2d-semester 3d-grade to 5th-grade levels. Students who have an above-average reading ability may work through much of the materials on their own after the first two introductory activities. The *Forming With Movement* workbook is designed to be totally teacher-directed, however, and the culminating activities are to be done as a whole group.

The activities require a good deal of open space for free movement, and when possible the teacher is encouraged to take the students outdoors to work on the materials.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6, e.g., 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States. They use carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

After the pilot trial of the materials, the program continues to gain information about the utilization of the published version of the package on a yearly basis.

The pilot evaluation of *Forming With Movement* was carried out in 3d-grade classes in four local schools with widely varying ethnic and socioeconomic characteristics. None of the four teachers had special training or knowledge of dance or movement education. The results of these evaluations, which included intensive observation, teacher and student questionnaires and interviews, and performance measures specifically constructed to assess the major hypothesized outcomes of the unit, support the following claims. Students who received package instruction were able to demonstrate kinesthetically an understanding of the majority of the major movement concepts underlying the package and could apply these terms critically according to the criteria for forming established by the package. Students evidenced a high degree of involvement and satisfaction with the materials, measured by both self and teacher reports. Although the activities are necessarily somewhat noisy and require moving desks to achieve the needed classroom space, teacher response to the package was very positive. These materials were observed by teachers to increase constructive group interaction and communication among their students and were judged particularly effective in helping to integrate the shyer students into the group.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials (in sets): 6 *Forming With Movement* workbooks 6 *Level* books 6 *Dimension* books 6 *Direction* books	1 set per 6 students	*		
Teacher materials: 1 Teacher's guide				

*Undetermined at this time.

DEVELOPER/AUTHOR:

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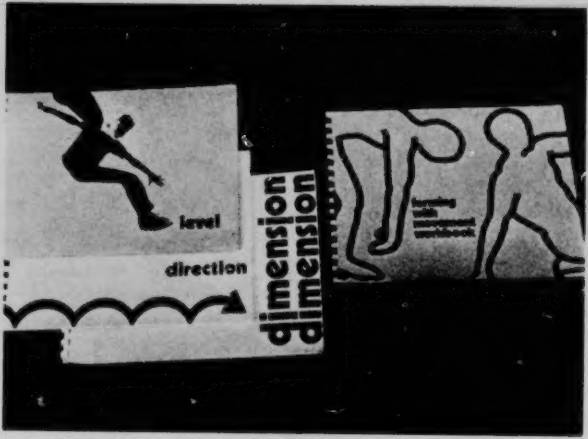
Sharon Bocklage, Editorial Coordinator
Linda Slama Kelly, Product Developer

AVAILABILITY

***Forming With Movement* is copyrighted and will be completed by November 1975.**



INFORMATION CURRENT AS OF MARCH 1975 ■

AESTHETIC EDUCATION

RD 010 032

MAKING SOUNDS INTO PATTERNS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package designed to provide primary students with some basic skills to make them more sensitive listeners to music

One of the Aesthetics and the Creative Process series of the *Five Sense Store* packages, *Making Sounds Into Patterns* is designed to provide primary students with some basic skills which will help make them more sensitive listeners to music. The students take part in listening and performing activities intended to initiate appreciation of whole musical works through conscious awareness of musical components.

This package stresses an understanding of the part played by patterns of sound duration and pitch in the total musical work. Students listen to short, medium, and long sound durations and manipulate symbols representing these periods of sound. Using the visual symbols, the students create patterns by combining various sound durations in a series. Then they perform their own patterns or those of their classmates with a musical instrument or their own voices. The package's next step adds pitch to the duration patterns. This approach readies students to understand that whole musical works are constructed of patterns which supply form, variety, and unity to a musical work.

Certain basic musical skills are necessary for providing access to higher musical understanding. Such skills are essential because the highly abstract nature of music requires students to reach an aural starting point from which to move along a path toward musical understanding.

The approach of this package to the understanding of communication is based on the students' current level of relating to sound, that is, their relationship to the three levels of aural perception—hearing, listening, and assessment. Most primary students have attained the hearing level. This level has no special aesthetic significance and may be equated with a visual equivalent of looking but not seeing. On the other hand, the third level, assessment, implies analysis and performance training. To the young student, this level is of no major consequence. It is the remaining level—listening– which can provide for the primary student a major inroad into the art of music.

Sample Lesson

(Addressed to Teachers)

"Creating Patterns of Sound Duration and Pitch"

General Description: Students will create their own patterns of sound duration and pitch, and the class will perform their compositions.

Procedure: You have now arrived at the most vital experience of this package. Students can become creators of original patterns. It is hoped that they will insist on new durations for more variation and develop original symbols for implementing these durations.

Distribute student color-coded pattern sheets and pencils. You may begin this experience by saying to the students, "Can you write out a pattern? What kind of marks can you make to show l—o—n—g, m-i-d-d-l-e, and short durations in your pattern?"

At first, encourage them to think in terms of making symbols with their pencils that look like the desk-top symbols they used earlier. Tell the students, "When you have finished your own patterns, we will choose one to place on the large pattern board. Then you and the whole class will play it."

When most of the students have had time to create original patterns, choose one and copy it onto the large pattern board with large duration symbols. "OK class—let's play Andy's pattern." Or, "Andy will play his pattern." After the pattern has been played, collect all the materials.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Music.
Exploration of patterns of sound duration; exploration of patterns of pitch duration; relationship of patterns of sound and pitch duration to total musical work; creation of student patterns of sound and pitch durations.

AESTHETIC EDUCATION

RD 010 032

INTENDED USERS AND BENEFICIARIES

Making Sounds Into Patterns has been designed for and formally tested with students in the 1st grade.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students to understand the part played by patterns of sound duration and pitch in a total musical work.

PATTERNS OF USE

Making Sounds Into Patterns is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music or linked with other Aesthetic Education Program (AEP) packages which are related to art, dance, drama, and literature and which are clustered around Aesthetics and the Creative Process.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by judging student products and oral responses. Guidelines for assessing the responses are written in the teacher's guide.

TIME REQUIREMENTS

Making Sounds Into Patterns requires approximately 5 hours to complete.

IMPLEMENTATION PROCEDURES

Making Sounds Into Patterns will not require a specialist teacher. The lessons in the package call for large- or small-group instruction in addition to individual student work. Students may have to sit on the floor in order to be close enough to the pattern board to see it clearly. The teacher is encouraged to relate the concepts in the product to harmony in music.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music will be able to implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package.

After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests. First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on the utilization of the published version of the package on a yearly basis.

Two stages of developmental evaluation of this package have been carried out in four 1st-grade classrooms in the St. Louis area. Interviews with the students indicate that the great majority of them enjoyed working on the package and almost all of them had learned the key concepts in the package.

Other results of the interviews conducted with students and teachers have indicated that certain modifications should be made in these materials with regard to the student equipment supplied and clarification of goals. These revisions will be carried out before the materials are published.

This package is primarily experimental in nature. For this reason further claims based on technical data cannot be made at this time. There are tentative indications that experience with the materials may lead to increased musical memory and may serve as an advance organizer for future experience in learning musical notation. The same care used in developing this product is evidenced in CEMREL's decision to revise it further after the two stages of evaluation already completed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student Materials:				
Large pattern board with 36 duration symbols; 12 short, 12 middle, 12 long	*	*		
Packets of student, desk-top symbols				
Color-coded student pattern sheets				
Student pattern reading booklets				
Teacher Materials:				
Teacher's Pitched Pattern Booklet		*		
Cassette information tape				
Teacher's guide				

*Materials in this package are still in the prototype stage. Packaging and cost determinations have not yet been made.

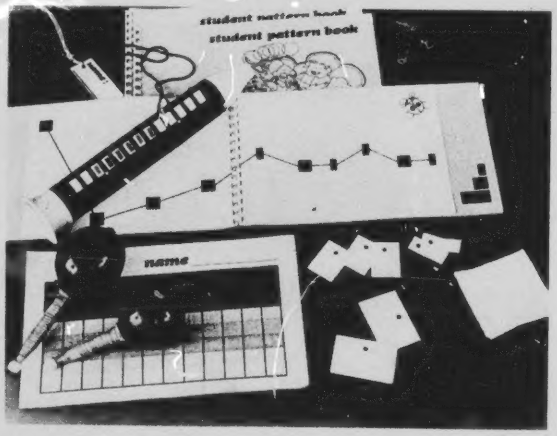
DEVERLOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

AVAILABILITY

The anticipated completion date of *Making Sounds Into Patterns* is late 1975. The package is copyrighted.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 033

PERCEIVING SOUND WORD PATTERNS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package which introduces 2d-grade students to word patterns as devices used in literature

This package, part of the Aesthetics and the Creative Process group of the *Five Sense Store* packages, introduces students to word patterns as devices used in literature to communicate meaning and feeling. Through the package, students develop an understanding of the properties of three of these literary devices (alliteration, refrain, and rhyme). They show their grasp of these devices by using onomatopoeia to create word patterns and five-word poems which make use of alliteration, refrain, and rhyme. The three poetic devices which are the focus of the package—alliteration, refrain, rhyme—depend upon repetition for their effect. By perceiving and using these poetic devices, the students understand that they can organize and structure words by repeating them in certain combinations and arrangements.

The package introduces the students to onomatopoeia as an element of literary language. (Throughout the package, the term "sound words" has been substituted for "onomatopoeia.") The package provides students with an opportunity to become aware that literature makes a greater use of the sensuous qualities of language than does nonliterary language. Unlike the person who uses language primarily to impart information, the writer of literature chooses words for sound and meaning, using sound as a way of reinforcing meaning. By introducing sound words as a phenomenon in literature and by dealing with word choice, the package provides students with some ways of using sound to point to meaning.

Sample Lesson

(Addressed to Teachers)

Lesson 5

Concept: A sound word is a word with sensuous qualities—a word that sounds like what you hear. Sound words are used to enhance meaning.

General Description: The students will work from the sound word to a visual image fitting that word. They will suggest and draw pictures to illustrate sound words both individually and as a large group. They will create a sound poem and record it.

Procedure: Ask the students to think of drawings to go with "beep beep," "bonk bonk," and "bam bam." Ask them what mental image is suggested by each of the sound words. Then you become the class artist and draw pictures from the students' suggestions. Get two or three ideas from the students for each of the sound words. Give the students the following directions for individual work: Tell them to keep their sound words secret until the sharing period. Ten to fifteen minutes should be sufficient time for the drawing. On your paper, draw a picture to go with one of these sound words: Splash, ahhh, zip, grrr, eeek, pow, tap. Write the sound word on one side of your paper. Draw your sound word picture on the other side of your paper. To share, have students hold up their drawings and ask the class to guess which sound word is depicted. Then create a sound poem from the sound words. Orchestrate these sound words and record the resulting sound poem.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Language arts/literature.

Alliteration is the repetition of initial or final consonant or vowel sounds. Used in conjunction with onomatopoeia, alliteration will produce a word pattern in which initial or final consonant or vowel sounds dominate. Refrain is the repetition of sound word patterns at intervals within a poem or song. Rhyme means similar or identical sounds placed in corresponding positions within a word pattern. A simple poem form containing five one-word lines, at least the middle three of which are sound words, can be used to review alliteration, rhyme patterns, and refrain.

INTENDED USERS AND BENEFICIARIES

Perceiving Sound Word Patterns has been designed for use by 2d-grade students, but may be used with older children as well.

GOAL(S) OR PURPOSE(S)

The goals of this package are: (1) To make students aware that sound is used in literary language to communicate meaning and emotion; (2) to bring students to an awareness that onomatopoeia has qualities which stimulate the senses and make us see and hear more keenly; (3) to help students recognize sound words, design visual representations of sound words, and use them in their own oral and written communications; (4) to make students more aware that sound is used in literary language to communicate meaning and emotion and that patterns of sound in literature are created through choosing and arranging words into a variety of word patterns; and (5) to help students recognize alliteration, refrain, and rhyme in literary works appropriate to their age.

PATTERNS OF USE

Perceiving Sound Word Patterns is a self-contained set of materials with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in literature, language arts, or creative writing; linked with other AEP packages which are related to literature and writing; or used with other packages in the Aesthetics and the Creative Process group.

ASSESSMENT PROVISIONS

One of the learning games (Sound Word Bingo), which is an activity in the package, is suggested for use as a pretest. In addition, the teacher's guide contains guidelines for assessing the oral and written products of students.

TIME REQUIREMENTS

Perceiving Sound Word Patterns requires approximately 5 to 8 hours to complete, excluding optional activities and followup experiences. The time also may be longer if the teacher wishes to spend more time on sharing the results of the creative thinking and creative writing periods. There are 10 separate activities, each requiring about 30 to 45 minutes.

IMPLEMENTATION PROCEDURES

Perceiving Sound Word Patterns does not require a specialist teacher. This package has been tested with students in 2d grade, but may be used with older children at the discretion of the teacher or curriculum specialist.

Most of the activities would do well as introductions for various artistic experiences, particularly creative writing. Thus, it may be wise to present the activities in conjunction with regularly scheduled artistic periods or creative writing periods.

The activities require the students to work in a large group led by the teacher, in pairs or in small groups, and individually. Some activities will require rearranging the classroom.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6, such as, 12-student, 18-student, or 24-student sets with teacher materials. Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated in its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any forms of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from the classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot-stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot-trial evaluation of the materials, the program continues to gain information about the utilization of the published version of the package on a yearly basis.

A prepublication version of the package was tested in 2d-grade classrooms in local schools. Student satisfaction with the package was high; and students reported learning from it. Based one teacher and evaluator comments, the package is being revised prior to publication.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
6 *Creating Word Patterns, Zip, Zap, Zoom* (books) 1 *Investigating the Elements: Sound Words, Abracadabra* (book) 6 game boards 1 pad of sound word story sheets 1 pad of alliteration sheets 1 pad of word pattern exercise sheets 1 pad of sound word sheets 1 pad of rhyme sheets 1 pad of refrain exercise sheets	1 set per 6 students	*	Evaluation sheets consumable yearly	
Teacher materials: Teacher's guide 1 sound word bingo bag 2 sets of sound word stamps 3 cassette tapes		*		

*Price has not been determined.

DEVELOPER/AUTHOR:

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Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Bennett Tarleton, Product Developer

AVAILABILITY

***Perceiving Sound Word Patterns* is copyrighted and is scheduled for publication in late 1975. It will be available from:**

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 034

RELATING SOUND AND MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)

A package intended for 2d graders which explores the relationships that exist between sounds and body movements

This package, part of the Aesthetics and the Creative Process group of the *Five Sense Store* materials, explores the relationships that exist between sounds and body movements. Looking, listening, moving, making sounds—these are ways the primary students experience and learn to differentiate high-low, fast-slow, loud-soft, and strong-weak sounds and movements. Materials to stimulate the exploration—a film, a series of recorded sounds, the continuum book—encourage the students to notice the sounds and movements that they see and make daily. Then students work with materials that focus and refine their perceptions (soundmakers, flashlight belts, charts, observation sheets). The concluding lesson presents an expressive, filmed example of the fusing of sound and movement, shown not as something for students to copy, but as a summation of awareness arrived at through the package.

This package will encourage students: (1) To explore sound elements by listening to and producing sounds of varying timbres within continuums of high-low (pitch), loud-soft (intensity), and fast-slow (tempo); (2) to explore movement potential within three quantitative dynamics by responding to examples of movement in a film and in the continuum book (working with their body movements and shadows, they will develop and show at least one example of each of these movements); (3) to explore relationships of sound and movement by matching and contrasting sounds and movements they make; and (4) to integrate the concepts presented in the previous lessons by developing a sound-movement statement that incorporates matching similar sounds and movements and contrasting opposite sounds and movements. They will evaluate their own work and that of their fellow students along with the teacher.

Sample Lesson

(Addressed to Teachers)

Concept: One way in which sound and movement can be related is to contrast the dynamics of the corresponding elements of the two media.

Objectives: The students will explore a relationship of sound and movement by contrasting sounds and movement. They will make sounds and contrast movements to the sounds and vice versa.

Procedure: Using the Sound and Movement chart, introduce the concept of contrasting. Pair the students. Assign the high-low continuum to begin the contrast exploration. Remind the students of their matching of sounds and movements in lesson 4, and point out that contrasting is another way that sounds and movements can be related. Using the chart, help them understand that to contrast in this context means to convey a sound quality that is opposite to a movement quality.

Decide which of the pair is the mover and which is the soundmaker. Soundmaker makes a high sound. Mover responds with a low movement. Then soundmaker makes a low sound, and mover responds with a high movement. Switch order: Mover moves and soundmaker responds. Switch roles: Mover becomes soundmaker and vice versa. Any verbalization of what the mover means to show by the movement or what quality the soundmaker means the sound to convey should be discouraged at this point. Rather, encourage them to tune in to their partners by watching and listening. Some pairs of students tend to repeat the same kinds of sounds and movements. A switch in partners at any time in the exploration could stimulate new thinking about how to move and make sounds.

Invite students to evaluate their explorations with resonses to such questions as: "Which contrast was most difficult for you? Why do you think so?"

Work first with the fast-slow continuum and then with the loud-soft/strong-weak continuum. Have student pairs show their contrasts to one another. The performance of successful work can stimulate other students who have difficulty finding or contrasting the sounds or movements.

RD 010 034

SUBJECT AREA(S)

Aesthetics and the Creative Process: Dance-music.

Exploring and experiencing continuums within pitch, tempo, and amount of intensity in sound; exploring and experiencing continuums within amount of space, amount of time, and amount of force in movement; exploration of the sound-movement relationship by matching and contrasting; the process of developing a sound-movement statement that incorporates matching similar sounds and movements and contrasting opposite sounds and movements.

INTENDED USERS AND BENEFICIARIES

Relating Sound and Movement is designed primarily for 2d-grade students. It can be used at the discretion of the teacher, however, with 1st- or 3d-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to increase a student's capacity to experience a dance-music event by refining the student's ability to differentiate among high-low, fast-slow, loud-soft/strong-weak sounds and movements and to perceive several possible relationships between sound and movement.

PATTERNS OF USE

Relating Sound and Movement is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance or music; linked with other music- or dance-based packages developed by the aesthetic education program to form a curriculum; or linked with other AEP packages which are related to art, literature, theater, and film and which are clustered around aesthetics and the creative process.

ASSESSMENT PROVISIONS

Two pretests, one asking students to discriminate among sounds and another dealing with the ability to discriminate movement, serve as the first two activities. These can also be used as posttests. Teachers and students assess learning based on student activities and oral responses. Guidelines for the assessment are in the teacher's guide.

TIME REQUIREMENTS

The activities in this product require 8 to 10 hours to complete, depending upon the way in which the teacher chooses to structure them.

IMPLEMENTATION PROCEDURES

Relating Sound and Movement does not require a specialist dance or music teacher. It is recommended that it be taught in a number of small groups working independently, rather than in one large group. It would also be possible to allow individual students to work independently on certain activities. Thoughtful exploration and self-evaluation by the students are encouraged throughout this package.

Field reports indicate that the materials stand up well with repeated use. Consumables are minimal and are easily purchased from the publisher.

Summary Cost Information

Packages can be purchased in varying multiples of 6; e.g., 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students in $145. Price is subject to change.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in music or dance can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Cost for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socioeconomic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented with no aid beyond that given in the teacher's guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carried out an observational monitoring of trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package.

After revision, a second, pilot-stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests. First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher; and third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program continues to gain information on a yearly basis.

A prepublication version of the package was tested with two 3d-grade classes in one racially and economically mixed local school. A questionnaire administered before and after the use of the package indicated that students were improved in their ability to recognize and name the characteristics of movement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student Materials:				
6 flashlights with belts	1 set per 6 students (at one time)	29.00*	Pre-test and evaluation sheets consumable yearly or after five uses	
2 pads of sound pre-test sheets (30 sheets in each pad)				
2 pads of observation sheets for evaluation (30 sheets in each pad)				
Teacher Materials:				
Teacher Guide		116.00*		
16mm pre-test sound color film				
12" LP disc record				
Double-faced wall chart				
Book of photos				

*Prices subject to change

DEVELOPER/AUTHOR:

CEMREL, Inc.
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3120 59th St.
St. Louis, Mo. 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Dale Hamilton and Linda Slama, Product Developers

AVAILABILITY

Relating Sound and Movement is currently available from the publisher. The product carries a 1973 copyright which is claimed until 1981. Order from:

The Viking Press
Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

RELATING SOUND & MOVEMENT
HIGH

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 035

SWRL ELEMENTARY ART PROGRAM

A program for grades K-6 which provides resources for sequenced, systematic art instruction

The *SWRL Elementary Art Program* provides research-based, classroom-verified resources for sequenced, systematic art instruction. The performance-based program is generally used in grades K-6.

Program materials and procedures enable teachers with little or no background in art to provide pupils with a solid foundation for skill attainment in the visual arts and to encourage independent inquiry. Teachers with specialized art training will also find that the program enhances the instructional options available to them.

The program promotes art performance and appreciation skills through the development of artistic proficiency consistent with pupil maturity and experience. Pupils learn to produce works of art using a variety of media, to make informed judgments regarding the visual properties of art works, and to identify art works in their appropriate cultural/historical contexts.

Instructional resources are flexibly formatted to provide classroom-verified options for illustration of art concepts and development of production skills. Three types of filmstrips are provided:

1. Production filmstrips demonstrate the step-by-step procedures for each unit activity.
2. Visual analysis filmstrips illustrate visual features and relationships characteristic of selected art works.
3. Critical analysis filmstrips help establish the cultural and historical context of contemporary and traditional art.

Teacher materials provide suggestions for introducing specific art concepts and skills, for conducting activities that promote a practical understanding of each concept, and for effective utilization of other program resources during instruction.

SUBJECT AREA(S)

The program promotes specific art production skills and an understanding of basic art concepts.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades K-6.

Program resources provide comprehensive materials and procedures for teachers with little or no background in art and enhance the instructional options of teachers with extensive art training.

GOAL(S) OR PURPOSE(S)

Instruction is designed to promote art outcomes identified by the National Assessment for Educational Progress. Activities develop increasingly sophisticated skill attainment as pupils progress through the program. Opportunities for individual expression and decisionmaking have been systematically built into program lessons.

Pupils participating in the program develop skills related to art production, appreciation, and history.

Production—Children develop proficiencies for producing works of art in a variety of media.

Appreciation—Children learn to make informed judgments based on a developing sensitivity to both natural and manmade beauty.

History—Children learn to place art works in their appropriate cultural/historical contexts.

PATTERNS OF USE

The program is organized into ungraded instructional blocks. Each block is divided into units that promote art skills and an understanding of art concepts through carefully sequenced activities.

In a four-activity unit, the initial activity introduces new techniques and concepts. The second activity provides for imitation and application, and the third involves variation and further development of techniques and concepts. Activity four provides for cumulative expression of skills learned, incorporating previously introduced techniques and concepts.

While the materials and procedures represent a comprehensive program of art instruction for grades K-6, program resources enable the teacher to supplement planned art activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific art program skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction on program skills.

The art program quality assurance system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The system also provides a means by which the pupil proficiency attained with the art program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

The *SWRL Elementary Art Program* is organized into 14 blocks of instruction. Scheduling of individual lesson activities depends upon teacher judgment of pupils' learning needs and interests, and the amount of instructional time available. If two lessons are conducted weekly, pupils generally complete two instructional blocks during the school year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the art program efficiently and effectively. For example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the programs effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials for performing administrative functions related to the *SWRL Elementary Art Program*. For example, there are suggestions for: Conducting briefing sessions for school boards, parents, and community members; ordering and distributing materials; conducting followup training sessions for teachers; monitoring the operation of the program during the school year; and integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 7 tryouts involving in the aggregate more than 850 classrooms and 26,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Activities and materials guide	1 per teacher at appropriate block	Not determined	Reusable	
Filmstrip set including production, critical analysis, and visual analysis filmstrips	Filmstrip sets (may be shared; 1 set per 2 or 3 classes at appropriate block)		Reusable	
Art supplies typically available in schools (newsprint, construction paper, manila paper, tissue paper, tempera, flat bristle brushes, water color brushes, crayons, chalk, clay, yarn, liquid starch, sponges, scissors, paste)				Local Education Agency

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL Elementary Art Program* is copyrighted and is currently available from:

SWRL Educational Research and Development
Division of Resource Services
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 036

SWRL MUSIC PROGRAM

A program for grades K-6 which provides resources for conducting sequential music instruction

The *SWRL Music Program* provides research-based, classroom-verified resources for conducting sequential music instruction. The performance-based program is generally used in kindergarten through grade 6. Program materials provide comprehensive resources for the teacher with no background or training in music and enhance the resources available to the music specialist.

The program makes the expressive possibilities of music available to all children through the development of music proficiency consistent with their maturity and experience. Pupils learn to employ basic music concepts in activities involving music performance, composition, and appreciation.

Instructional resources combine flexible format and multimedia design. They provide classroom-verified options for presentation of music selections and illustration of music concepts. Materials, including recorded songs and song elements, piano-vocal arrangements, illustrated posters and cards, and suggestions for the use of classroom instruments, insure a rich variety of learning experiences.

Teacher materials provide suggestions for introducing specific music concepts, for conducting activities that promote a practical understanding of each concept, and for effectively utilizing other program resources during instructions.

SUBJECT AREA(S)

This program promotes specific music skills and an understanding of basic music concepts.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in kindergarten through grade 6.

Program resources were designed for teachers with varying musical backgrounds. These resources provide comprehensive materials and procedures for teachers with little or no background in music and enhance the instructional options of teachers with extensive musical training.

GOAL(S) OR PURPOSE(S)

Pupils participating in the program develop skills related to music performance, composition, and appreciation. Concepts taught in the program may be classified in the following categories: Rhythm, melody, harmony, form, time color, and dynamic level. Instructional activities are designed to promote an increasingly complex understanding of these concepts as pupils progress through the program.

PATTERNS OF USE

The program is organized into ungraded instructional blocks. Each block is divided into units that promote music skills and an understanding of basic music concepts through carefully sequenced activities. The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills.

While the materials and procedures represent a comprehensive program of music instruction for kindergarten through grade 6, program resources enable the teacher to supplement planned music activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on accurate information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific *SWRL Music Program* skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction in program skills.

The music program quality assurance system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The system also provides a means by which the pupil proficiency attained with the *SWRL Music Program* can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

The *SWRL Music Program* is organized into 14 blocks of instruction. Scheduling of individual lesson activities depends upon teacher judgment of pupil learning needs and interests, and the amount of instructional time available. If three lessons are conducted weekly, pupils generally complete two instructional blocks during the school year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the *SWRL Music Program* efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the programs effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials for performing administrative functions related to the *SWRL Music Program*. For example, suggestions are made for: (1) Conducting briefing sessions for school boards, parents, and community members; (2) ordering and distributing materials; (3) conducting followup training sessions for teachers; (4) monitoring the operation of the program during the school year; and (5) integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher, with no requirement for specialized personnel. During each of the 6 tryouts involving in the aggregate more than 900 classrooms and 28,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schemes. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance as related to sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of assuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance (QA) has been developed. The QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and are available for sharing with parents. This information has proved especially useful in furthering parent/school communication and in fostering parental support.

RD 010 036

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set including notation cards, tone bell cards, instrument posters, and activities and materials guide	1 set per 30 students at appropriate block	37.50	Reusable	
Audiocassette tapes including song tapes, listening tapes, and concept tapes	Tapes may be shared, 1 set per 2 or 3 classes at appropriate block	10.00	Reusable	
Training and installation materials including filmstrips, audiotapes, installation guide, and tryout coordinator manual	1 set per district	20.00	Reusable	
Cassette tape playback machine	Machines may be shared by participating classes		Reusable	Local education agency
Classroom percussion instruments: 1 set tone bells with steps 1 pair cymbals 1 pair finger-cymbals 1 tambourine 1 pair maracas 1 tone block with striker 1 drum 16 pairs rhythm sticks 1 triangle 1 pair sandblocks 1 autoharp with case (blocks 5 and 6 only)	Instruments may be shared, 1 set per 2 or 3 classes		Reusable	Local education agency

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

SWRL claims common law copyright on the materials. The *SWRL Music Program* is available for the 1975-76 school year from:

SWRL Educational Research and Development
Division of Resource Services
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 037

ARTS/PARTS: PERCEIVING AND ANALYZING THE ARTS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A teacher education package which deals with the arts as examples of aesthetic education

The Teacher Education series of the Aesthetic Education Program (AEP) includes this instructional package, which uses the arts as examples for aesthetic education. In order to understand and use the arts creatively and as an effective teaching tool, the nonarts specialist must become familiar with the elements in arts forms and how they relate to the aesthetic qualities of our world. Through the use of a large multimedia book entitled *Arts/Parts*, the teacher participant explores some of the elements in each of five arts: Drama, music, visual arts, dance, and literature. The elements are introduced to the participant in each of five major activities. Then the participant actively explores the elements through additional activities using the already-learned arts vocabulary. The book is a self-contained unit consisting of such things as a foldout performing space board with movable figures, a music board, excerpts from drama and literature, recorded selections, a visual arts puzzle, various types of activity cards, photographs, and critical reviews. A manual within the book provides the participant with objectives, directions, and followup activities. Reference readings by arts experts discussing the elements of each art form are provided, as are an extensive bibliography and concept statements from related AEP children's materials, to aid the participant in curriculum development. Final activities encourage further arts exploration and ways of relating the learned knowledge to the elementary classroom.

This package encourages participants (1) to explore some musical elements of rhythm, melody, harmony, meter, and tone color through a sound board with overlays and accompanying tape recording, and to relate the knowledge learned to other musical compositions; (2) to explore such elements as line, color, shape, texture, and value through overlays of Picasso's *Guernica*, and to relate this vocabulary to other works of art as well as create their own composition with an elements puzzle; (3) to explore such elements as motion, space, and setting in drama and dance through a performing space board with movable figures and setting cubes; (4) to explore some elements of plot, conflict, intention, subtext, character, and setting in drama through analyzing and acting out a written script; (5) to explore these elements again by analyzing a scene from *Hamlet* with provided audiotape to see how the written word and the spoken word combine in drama; and (6) to look at such elements as imagery, metaphor, figurative language, theme, setting, character, and conflict in literature by analyzing a short story and a poem and then creating their own works by using word picture cards. Final activities encourage the participants to go out and seek additional arts resources, to become active participants in arts events, and to use the knowledge gained in *Arts/Parts* in the elementary classroom.

Sample Lesson

Visual Arts Elements

This lesson familiarizes the participants with some visual arts elements of line, shape, color, texture, and value. The first activity involves Picasso's *Guernica*, which has been taken apart on a series of acetate overlays, each overlay showing one of the above elements. The participants can see how Picasso used each of these elements by first individually examining the overlays. When the overlays are all placed on top of each other, the participants can see how the work comes together to form an aesthetic whole. The same procedure is then done by the participants using Rousseau's *The Dream*, blank overlays, and a grease pencil provided for drawing and shading. In the third activity, an elements puzzle made up of abstract black-and-white pieces is provided. The participants select a theme and create their own visual arts work. They are asked to articulate why they used various elements in a specific way to best illustrate the chosen theme.

Finally, a series of photographs which represents a variety of visual arts forms in different periods and styles (such as, painting, sculpture, architecture) is presented. The participants are asked to discuss these pictures and to make comparisons and contrasts by using the learned vocabulary. The participants are also given a reference reading by Reid Hastie from *Encounter With Art*, which further details the elements in the visual arts. Additional information on the visual arts used as examples in the photographs is provided in a resource section in the manual, as is a detailed analysis of *Guernica*.

SUBJECT AREA(S)

Teacher Education: Aesthetic education, elementary education, music, visual arts, drama, dance, and literature.

Introduction to elements in various arts forms: How these elements combine in a unique way to create a specific aesthetic intent; the relationship of the arts to aesthetic education; the development of a vocabulary which can be applied both to the arts and to the aesthetic qualities of the everyday world; the development of a critical, responsive audience to arts objects and events; curriculum development in aesthetic education.

INTENDED USERS AND BENEFICIARIES

These materials are designed for preservice and inservice teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by nonarts specialists and can give the participant varied experiences in several arts forms (literature, drama, visual arts, and music).

GOAL(S) OR PURPOSE(S)

The purposes of this instructional unit are to teach participants: (1) To identify elements that are in art forms; (2) to use a shared critical language in discussing the elements and in analyzing the formal, part/whole relationships within works of art; (3) to use the elements as ways of describing and analyzing the aesthetic qualities in the environment and understand the similarities and differences between natural objects and experiences and those created with specific aesthetic intent; and (4) to directly apply the vocabulary methods, techniques, and activities to the elementary classroom.

PATTERNS OF USE

Arts/Parts: Perceiving and Analyzing the Arts is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, arts in general education, and an integrated arts course. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of the provided manual. These materials are applicable in a variety of educational settings, including traditional university courses and short-term workshops.

ASSESSMENT PROVISIONS

Learning is assessed by the teacher trainer and the participants. Although the participants are encouraged to use their own perceptions first when analyzing works of art and developing a vocabulary, additional information from experts in the field is provided through reviews, critical analysis, reference readings, and information on photographs used in the visual arts and performing arts section. The participants use these sources to compare and evaluate their own perceptions, as well as to justify and to compare their own perceptions in discussions with the teacher trainer, their peer group, and arts specialists whom they contact. Participants will also be able to assess how their ability to analyze a professional arts event has been heightened through the use of vocabulary presented in the unit when involved in the final activity telling them to attend an arts event.

TIME REQUIREMENTS

Arts/Parts: Perceiving and Analyzing the Arts takes approximately 10 hours, with individual sessions taking not less than 45 minutes to complete—depending upon the class size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occurs.

IMPLEMENTATION PROCEDURES

Arts/Parts: Perceiving and Analyzing the Arts does not require a specialist teacher. Participants may have their own books, or two or three participants might share a book. Individual work and small-group discussion are encouraged to enhance interaction. Some of the activities can be done on an individual basis; others have varying degrees of involvement with other members of the teacher education group. Space is required because some activities involve movement, and room is needed to spread out some of the materials. The manual outlines all procedures. An individual can go through this entire set of materials without the aid of a teacher trainer by following the manual procedures.

The teacher trainer or the teacher education group is encouraged to relate these activities to professional arts events, to bring in arts specialists to answer any questions and provide further information, and to use the bibliography as a source for further ideas and reinforcement. Participants are also encouraged to use the concepts provided from AEP children's packages for actual curriculum development and to try out these ideas with elementary school children.

RD 010 037

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education can implement this unit of instruction. Curriculum consultation is available from CEMREL, Inc. Costs for such services can be obtained from this organization.

ASSURANCES AND CLAIMS

The instructional unit, *Arts/Parts: Perceiving and Analyzing the Arts*, is presently in development. When completed, it will be tested as defined in the *Basic Program Plan* (CEMREL, 1972) and *A General Plan for Evaluating the Aesthetic Education Program's Teacher Education Packages* (Manis, 1974). At that time, appropriate assurances and claims will be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Arts/Parts (book)	1 per student	Not determined	Reusable	
Tape for music and drama activities				
Figures				
Cubes				
Grease pencil				
Puzzle				
Illustration of "The Dream"				
Word picture cards				
Manual				
Reference readings				

DEVELOPER/AUTHOR;

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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Margaret Harrison, Product Developer

AVAILABILITY

This set of materials will undergo field test during spring and summer 1975. The product will be covered by copyright.

Elements of Design
Line
Texture
Value & Shape
Color

INFORMATION CURRENT AS OF MARCH 1975

RD 010 038

THE CREATIVE PROCESS (PART OF THE AESTHETIC EDUCATION PROGRAM)

Materials for elementary teachers emphasizing the expressive qualities of an object or experience

The Teacher Education series of the Aesthetic Education Program (AEP) includes this instructional package, which deals with the creative process. This package is currently under development.

The materials will emphasize the expressive qualities of an object or experience—how individuals make unique statements by making choices and structuring parts in a certain way for a specific aesthetic intent.

Activities will be provided to enable participants to actively explore creativity through creating their own works, becoming competent in organizing aesthetic elements into a whole work, and in articulating their reasons for such choices. Interviews and photographs of well-known artists in various fields will be provided, as well as discussions with noted educators and other individuals actively involved in increasing aesthetic awareness. Although the materials will use the arts as examples, ways of encouraging the creative process in every child and the necessity for schools to foster this process will also be emphasized. Throughout this set of materials, practical suggestions and instructions for implementing the creative process in the classroom will be provided. Concepts from related AEP children's packages, such as the Aesthetics and the Creative Process series and the Aesthetics and the Artist series, will be presented as well as relevant reference readings and a bibliography.

This package will encourage participants (1) to actively explore the creative process by creating their own works of art, (2) to expand their critical language necessary for analyzing and judging works of art, (3) to use the arts as a teaching tool for aesthetic education, (4) to nurture the creative process in every child, and (5) to regularly seek out and utilize additional resources in the arts and aesthetic education.

SUBJECT AREA(S)

Teacher Education: Aesthetic education, elementary education, visual arts, music, drama, dance, literature, and film are the subject areas.

This programed course focuses on how an individual organizes elements for a specific aesthetic intent; the development of a critical language for analyzing one's own work and the work of professional artists; an understanding of different materials, methodologies and structures of arts works; rationale for encouraging affective as well as cognitive learning skills through the nurturing of the creative process in every child.

INTENDED USERS AND BENEFICIARIES

These materials will be designed for preservice and inservice teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a nonarts specialist and can give the participant varied experiences in several arts forms (literature, drama, dance, visual arts, and music).

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are to teach participants: (1) To organize their own method or structure for completing a whole work of their own design; (2) to describe and analyze the aesthetic decisions used in completing the whole work; (3) to transform the elements into whole works in a number of arts disciplines, and to be able to discuss and contrast the elements, methods or structures of a variety of arts forms; (4) to analyze and critique works of art; (5) to perceive, analyze, and discuss how professional artists organize elements into a whole work; and (6) to understand the need for aesthetic education and the encouragement of creativity in the elementary schools.

PATTERNS OF USE

It is anticipated that *The Creative Process* will be a self-contained unit of instruction with activities that are sequential and cumulative. It will be developed for use as part of an ongoing college curriculum or in teacher workshops. It may be part of an integrated arts course, an aesthetic education course, or an arts-in-general education course and can be linked with AEP children's packages in the Aesthetics and the Creative Process and the Aesthetics and the Artist series.

ASSESSMENT PROVISIONS

Learning will be assessed by the teacher trainer and the participants. Specific procedures will be delineated during development.

TIME REQUIREMENTS

It is estimated that these materials will take approximately 10 hours to complete, depending on the class size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occurs.

IMPLEMENTATION PROCEDURES

The Creative Process will not require a specialist teacher. Participants will probably work individually and in small groups to enhance interaction. A working space will probably be necessary. Specific procedures appropriate to the learning experiences will be delineated during the development cycle.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education will be able to implement this unit of instruction. Curriculum consultation will be available from CEMREL, Inc. Costs for such services can be obtained from this organization.

ASSURANCES AND CLAIMS

The instructional unit, *The Creative Process*, is presently in development. When completed, it will be tested as defined in the *Basic Program Plan* (CEMREL, 1972) and *A General Plan for Evaluating the Aesthetic Education Program's Teacher Education Packages* (Manis, 1974). At that time, appropriate assurances and claims will be made.

DEVELOPER/AUTHOR:

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Margaret Harrison, Product Developer

AVAILABILITY

This product is scheduled to begin testing in summer 1975. It will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 039

HOW DOES A RAINBOW FEEL?/ AN INTRODUCTION TO AESTHETIC EDUCATION

An overview for elementary teachers of the value of aesthetic education in the school

The Teacher Education series of the Aesthetic Education Program includes this instructional package which is an overview of aesthetic education in the elementary school. The preservice and inservice teacher, for whom the materials are designed, will view "How Does A Rainbow Feel?," a film containing material and information relating to concepts in aesthetic education program's children's packages. The film will illustrate the variety of aesthetic qualities in our environment: Sounds, shapes, patterns, colors, textures. It presents works of art as illustrations of such qualities and then relates these perceptions to the elementary classroom. Children will be seen actively exploring and discovering such areas as body movement, shapes, point of view, characterization, and dramatic plot, using materials from AEP packages. The participants will view children joyfully perceiving and reacting to the aesthetic qualities in the world around them, as well as analyzing their works, making choices, and participating in creative decisionmaking processes.

A paper by Dr. Harry Broudy, which will discuss concepts in aesthetic education and teacher education, will also be presented in these materials. It will provide the participant with additional information on aesthetic education and a rationale for materials and concepts such as those developed by the aesthetic education program. Discussion questions will be provided on both the film and Broudy's paper. Activities and resources relating to concepts in the film and the paper will be provided.

These materials will encourage participants: (1) To see the need for aesthetic education in the schools; (2) to understand that aesthetic education is a balance between emotional perceptions and reactions, and intellectual analysis and articulation; (3) to become familiar with one method of approaching an aesthetic education curriculum; (4) to look at a school system with which they are familiar in terms of an aesthetic education curriculum; (5) to discuss the role the arts have played in their lives, both formally (going to a concert) and informally (buying a plant for decoration); and (6) to have an understanding of the value of making aesthetic considerations part of every person's decisionmaking process.

SUBJECT AREA(S)

Teacher Education: Aesthetics, aesthetic education, the arts, and curriculum development.

Introduction to concepts in aesthetic education: An approach to curriculum development in aesthetic education; the value of the arts in elementary education.

INTENDED USERS AND BENEFICIARIES

These materials will be designed for preservice and inservice teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a nonarts specialist.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package will be to help participants: (1) To understand a rationale for aesthetic education in the elementary school, (2) to note concepts and materials applicable for curriculum development in aesthetic education, (3) to understand the role of the arts in general education, and (4) to relate the aesthetic qualities of our environment to the elementary classroom and the arts.

PATTERNS OF USE

How Does A Rainbow Feel?: An Introduction to Aesthetic Education will be a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, curriculum development, and arts in general education. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of a provided syllabus. These materials will be applicable to a variety of educational settings, including traditional university courses and short-term workshops.

ASSESSMENT PROVISIONS

Learning will be assessed by the teacher trainer and the participants. Specific procedures will be delineated during development.

TIME REQUIREMENTS

It is estimated that these materials will take approximately 10 hours to complete, depending on the class size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occur.

IMPLEMENTATION PROCEDURES

How Does A Rainbow Feel?: An Introduction to Aesthetic Education will not require a specialist teacher. Participants will probably work individually and in small groups to enhance interaction. A working space will probably be necessary. Specific procedures appropriate to the learning experiences will be delineated during the development cycle.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education will be able to implement this unit of instruction. Curriculum consultation is available from CEMREL, Inc. Costs for such services can be obtained from this organization.

MATERIALS AND EQUIPMENT

Unknown at this time.

ASSURANCES AND CLAIMS

This instructional unit is presently in development. When completed, it will be tested as defined in the basic program plan (CEMREL, 1972) and a general plan for evaluating the aesthetic education program's Teacher Education packages (Manis, 1974). At that time, appropriate assurances and claims will be made.

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AVAILABILITY

This product is in prototype stage of development and is scheduled for field testing during summer 1975. The materials will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 040

WHAT DO YOU SAY AFTER YOU SAY "I LIKE IT"?: A METHOD OF AESTHETIC PERCEPTION (PART OF THE AESTHETIC EDUCATION PROGRAM)

A teacher education package which is an introduction to aesthetic education concepts

The Teacher Education series of the Aesthetic Education Program includes this instructional package, which deals with an introduction to aesthetic education concepts and a method of aesthetic perception. The preservice and inservice teachers, for whom the materials are designed, use a variety of resources: a slide tape ("To Make New Again") with related discussion questions; a book entitled *How Many Ways Can You Look At a Turtle?*, which includes an explanation of Harry Broudy's method of aesthetic perception and activities centered around it; pertinent quotations on aesthetics, aesthetic education, the use of the arts as a vehicle for aesthetic education; an activity section based on the concept of "education of the senses," and relevant reference readings from experts in the field of aesthetic education. An activity involving discussion and arrangement of photographs of a bus station for its sensory, formal, and expressive qualities (Broudy) illustrates that aesthetic qualities can be found anywhere. Final activities in the materials give the participant the opportunity to choose from various arts activities designed to illustrate knowledge gained in previous activities. Throughout the materials, suggestions are made as to how this knowledge can directly be applied to the elementary classroom.

These materials encourage the participants: (1) To begin to define aesthetic education and the need for it in the schools; (2) to understand the arts as a vehicle for exploring aesthetic education; (3) to become familiar with commentary from individuals in a variety of fields who have been concerned with concepts in aesthetic education; (4) to gain a practical approach to understanding aesthetic perception by applying Harry Broudy's method of looking at the sensory, formal, and expressive qualities of an object or experience; (5) to participate in activities that emphasize Broudy's concept of the sensory—activities which increase the participant's personal sensory awareness and which can be easily done by a teacher in an elementary classroom; (6) to understand that, although the arts are clear examples of the aesthetic qualities in our world, such qualities can be found and explored anywhere; and (7) to actively participate in arts activities which will begin to familiarize them with possibilities for using the arts in the classroom.

Sample Lesson

"A Method of Aesthetic Perception" *How Many Ways Can You Look At a Turtle?*

This lesson is designed to provide the preservice or inservice teacher with a practical approach to aesthetic perception. Harry Broudy's method of looking at an object from its sensory, formal, and expressive qualities is presented in a simple and concise way, with illustrations indicating that an analysis method is easily applicable to both arts and nonarts objects and events. (The excerpt from *Enlightened Cherishing* in which Broudy discusses this method in detail is also presented in the reference readings as reinforcements.) The participant is first presented with photographs of a turtle, emphasizing that any object can be looked at in a variety of ways (such as, biologically, scientifically, how parts make up a whole, humorously, abstractly, and metaphorically). It is then emphasized that any object can also be looked at for its aesthetic qualities, and this is done in the text for the participant with a photograph of a turtle and a delineation of its sensory, formal, and expressive qualities. The participants are encouraged to bring in a natural object and go through the process again with the object to reinforce what they learned from the photographs of the turtle.

Throughout this set of materials, the participant is asked to keep a journal in which observations, perceptions, notes, and comments can be recorded. After the turtle photograph, the participants begin defining these aesthetic qualities and recording their perceptions in their journals. The next photograph is of a natural object, a cactus. The formal and expressive qualities are printed for the participant, who is asked to fill in the sensory qualities. In the next photograph, a people-created object of a series of telephone booths is illustrated. The sensory and expressive qualities are provided. The participant is to fill in the formal qualities. Finally, a photograph of birds perched on branches is provided. The participant fills in the sensory and formal, while the expressive qualities of the photograph are provided.

When the participant has a working knowlege of these terms, the focus is turned to the arts. A Trova sculpture is pictured and the sensory, formal, and expressive qualities of this art object are provided. Following this is a photographic collage indicating the scope and variety of arts forms. Finally, activities and discussion questions are provided which tell the participants to attend an arts event or bring in an actual arts object, and use Broudy's method of analysis in perceiving the arts object or event aesthetically and to discuss how such analysis heightens their appreciation and critical judgments.

Asking the participants to actually seek out such arts experiences is an important goal of these aesthetic education materials. Although every activity is self-sufficient within a classroom or workshop situation, it is also crucial for participants to have additional outside experiences to see how concepts relate to the everyday world. Such activities and discussion questions are provided throughout and are strongly encouraged. Therefore, each lesson may vary in length depending upon the amount of time alloted for such activities by the teacher education group.

SUBJECT AREA(S)

Teacher Education: Aesthetics, aesthetic education, and the arts.

Introduction to the idea of aesthetic education; how using a method of aesthetic perception can enable the individual to find aesthetic qualities both in the arts and in the "everyday" world; the relationship of aesthetic education and the arts; an intellectual, historical perspective on viewpoints regarding aesthetic education; the concept of "educating the senses" as a basis for beginning an aesthetic education curriculum.

INTENDED USERS AND BENEFICIARIES

These materials are designed for preservice and inservice teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a nonarts specialist and can give the participants varied experiences in several art forms (literature, drama, dance, visual arts, and music).

GOAL(S) OR PURPOSE(S)

The purpose of this instructional unit is for participants: (1) To identify and explain in a general way the goals and rationale of aesthetic education; (2) to note that the arts are a vehicle for the expression of the aesthetic values of a culture; (3) to consciously attend to and experience sensory data for their intrinsic value; and (4) to perceive, react to, and analyze those factors in an experience or object which contribute to or detract from its aesthetic character by using a method of aesthetic perception.

PATTERNS OF USE

What Do You Say After "I Like It"?: A Method of Aesthetic Perception is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, and arts in general education. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of the provided syllabus. These materials are applicable in a variety of educational settings, including traditional university courses and short-term workshops.

ASSESSMENT PROVISIONS

Learning is assessed by the participants and/or the teacher trainer. Students are given a preactivity asking them to define aesthetic education. This is also asked at the end of the materials, and participants can evaluate the growth of their perceptions, vocabulary, and understanding. Throughout the materials, participants are encouraged to use the provided method of aesthetic perception as a means of evaluation and analysis and to compare, contrast, discuss, and share their questions, comments, and insights with each other. Guidelines for discussion questions are provided as a means of suggesting standards for discussion. Participants are also asked to evaluate each others' work in the activity sections.

TIME REQUIREMENTS

What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception takes approximately 10 hours with individual sessions being not less than 45 minutes to complete depending upon the cl[illegible]s size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occurs.

IMPLEMENTATION PROCEDURES

What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception does not require a specialist teacher. This set of instructional materials has been tested with both preservice and inservice teachers. It is recommended that it be taught in small groups to enhance interaction and allow a teacher trainer to respond specifically to each participant. Students will require space for several of the activities and will need room to spread out some of the materials. The syllabus outlines all such procedures and has been rated as useful in testing situations.

If there are teacher trainers with a background in aesthetic education or the arts, they are encouraged to relate these materials to their own curriculum, bring in additional resources, and relate the learning experience to the specific needs and background of the teacher group, if possible.

If no teacher trainers have such a background or if the group is working independently, the syllabus provides all necessary information for implementation.

A teacher trainer is strongly encouraged to make the outside activities an integral part of this learning experience. Consumables are minimal and the materials in the package are easily manipulated and stored.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education can implement this unit of instruction. Curriculum consultation is available from CEMREL, Inc. Costs for such services can be obtained from the same organization.

ASSURANCES AND CLAIMS

Assurances

Information gathered by careful observation and questionnaires at each of the four field test sites indicated no harm has resulted from the use of this product.

Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such bias or inappropriateness of content in the package is directed to qualified persons in order to consider how the materials should be revised to eliminate such shortcomings.

Information gathered from four field tests of the materials indicates that the materials can stand alone in the hands of a competent teacher trainer in preservice and inservice training settings.

Claims

A major claim to be made about the Aesthetic Education Program's instructional materials in teacher education is that they represent the only comprehensive teacher education curriculum resource based on aesthetic education that has been developed in the United States, using the carefully defined development and evaluation procedures basic to the concept of an educational laboratory.

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package, or various package components, in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second evaluation is carried out in four or more teacher-training settings. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program; second, there must be evidence that the materials can stand alone in the hands of a competent teacher trainer; third, the materials must meet certain package-specific objectives, observable in the behavior of the persons who have studied the materials. After the above testing of the materials, the materials are revised on the basis of information gained during testing.

The evaluation of this product was carried out in four diverse preservice and inservice teacher-education settings. Two were school district inservice workshops, and two were university-based courses in which the participants were predominately preservice, elementary teachers. Observation and questionnaire data indicate that even teacher trainers who are not specialists in one or more of the arts are able to successfully implement the package. Qualitative assessment journals completed by package users indicate that most users are able to complete the instructional activities in the manner intended by the developer.

User satisfaction and judgments about the worthwhileness of the package were universally positive during the evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials:				
Discussion cards for slide tape		*		
How Many Ways Can You Look At A Turtle? (book)				
Bus station photo cards				
Bus station activity cards				
Worksheets for bus station game				
Final activity cards				
Reference readings				
Teacher trainer materials:				
Syllabus				
Slide tape				
Slide tape synchronizer manual		*		
*Aesthetics and the Problems of Education*by Ralph Smith, ed.				
Enlightened Cherishing by Harry Broudy				

*Materials are in field test stage; therefore, costs have not been determined.

DEVELOPER/AUTHOR:

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Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Margaret Harrison, Product Developer

AVAILABILITY

This product has completed the test cycle and is undergoing minor revisions. While a publication date has not been determined, it is anticipated that this product will be available in fall 1975. This product is covered by copyright.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 041

AESTHETIC EDUCATION LEARNING CENTERS (PART OF THE AESTHETIC EDUCATION PROGRAM)

A cooperative community effort to develop innovative teacher education programs in aesthetic learning

If Aesthetic Education is to become a reality in the Nation's schools, some basic changes must be made in Teacher Education Programs in the arts and aesthetics. CEMREL, Inc., has assumed responsibility for bringing information, needed to implement innovative teacher education programs, to such organizations as colleges and universities, school districts, and community arts groups. The Aesthetic Education Learning Centers (AELC), developed by the Aesthetic Education Program at CEMREL, Inc., are the result.

The AELC is a cooperative effort among agencies (e.g., schools, teacher education institutions, arts organizations, artists, community service organizations, State departments of education) working with each other and with CEMREL, Inc., in the development of aesthetic education programs. A minimum requirement in an AELC is at least three cooperating elementary schools and one or more cooperating agencies. The physical components include: modular learning environment, *Handbook: Teacher Education for Aesthetic Education*, *Handbook: Installation of Aesthetic Education Programs in Schools*, "Interagency Models for Implementing Aesthetic Education," Aesthetic Education instructional packages for students and teacher, and services such as workshops and consultants.

The modular components of the centers were carefully planned to be aesthetically pleasing and to provide an example of what an aesthetic learning environment can be. Through its activities via inservice and/or preservice courses, workshops, and institutes, the AELC provides teachers, student teachers, children, administrators, and university and college personnel with the instructional and conceptual resources necessary in gaining knowledge, skills, and confidence in handling aesthetic content. It is also a vehicle for implementing new programs in aesthetic education in schools. In addition, each center can provide individuals and groups with the necessary focus and orientation for improving the aesthetic climate of the community.

SUBJECT AREA(S)

Aesthetic Education: Teacher Education, Elementary Curriculum Designs, Learning Environment, Interagency Cooperation for Educational Change

The following are the major components of this product:

(1) *Handbook: Teacher Education for Aesthetic Education.* Areas covered in this document include course outlines for preservice and inservice instruction, the role of the arts specialist and the elementary classroom teacher, teaching/learning strategies, how to use community and instructional resources, and case studies of successful implementation of programs in Aesthetic Education

(2) *Handbook: Installation of Aesthetic Education Programs in Elementary Schools.* This document discusses Aesthetic Education as a separate area of study as well as how it can be related to the ongoing curriculum. Also included are procedures for implementation and evaluation.

(3) *Learning Environment.* The modular design based on circular configurations offers many arrangements to the user. Each component is separate and movable so the spaces can continually be altered according to function.

(4) *Interagency Models for Implementing Aesthetic Education.* Guidelines for bringing together arts activities and presentations by arts organizations, service organizations, governmental units, and business groups with Aesthetic Education Programs in the schools are provided.

INTENDED USERS AND BENEFICIARIES

The potential users and beneficiaries of the Aesthetic Education Learning Center Plan include a wide range of people. The immediate users in the field tests include classroom teachers, arts specialists, curriculum planners and developers, teacher education staffs (inservice and preservice), arts organizations which work with schools, learning environment planners, principals, and students.

GOAL(S) OR PURPOSE(S)

The goals of the Aesthetic Education Learning Centers are: (1) To provide an aesthetic environment for learning to both teachers and students, (2) to provide a facility and materials which are flexible enough so that various teacher education programs in aesthetic education can be designed and implemented, (3) to generate various methods for utilizing and extending the use of CEMREL's aesthetic education materials, (4) to generate new programs for teacher education in aesthetic education, (5) to establish Aesthetic Education Programs in elementary schools, and (6) to generate interest in improving the design of classroom environments.

PATTERNS OF USE

Eight centers and twenty-seven cooperating schools in various geographic locations are implementing the total Learning Center concept. There have been six basic patterns developed within the eight centers. The unique aspects of the patterns are due both to the combination of cooperating agencies working with AELC and their program structures. These are as follows:

1. CEMREL, professional arts organization (Performing Arts Foundation, Long Island, New York); and Board of **Cooperative Education Services (BOCES):**

Focus: Provides performing artist to work with teachers and children.

2. CEMREL, school district, and local university (This pattern is in operation in Memphis, Tennessee, and Jefferson County, Colorado.)

Focus: On aesthetic education staff development and curriculum revision; each cooperates with a local university; one is housed in an elementary school and the other is in a district-operated Staff Development Academy.

3. **CEMREL, adjoining school districts, university consortium:**

Focus: Three school districts (Oakland and Antioch, California, and New York City), in cooperation with several universities, joined efforts to form a Center which is housed in an arts-centered elementary program in one of the districts.

4. **CEMREL, arts council, and private university:**

Focus: A consortium arrangement between a private university (Oklahoma City University) and a local arts council (Oklahoma City) comprise another approach.

5. **CEMREL and State university:**

Focus: A State university (Illinois State University) incorporates the Center into its CORE-oriented elementary teacher education program.

CEMREL, State department, and school district:

Focus: A State department of education (Pennsylvania) in cooperation with a local school system has located the **Center in a vacated school building, works with State** Intermediate Units, and cooperates with a senior citizen and a special education program located in the same building.

ASSESSMENT PROVISIONS

Each site is provided assistance in developing those assessment devices which meet their needs. Examples of such devices include attitude scales and checklist for categories of implementation, i.e., designation of staff, community resource utilization. The instructional resources have built-in assessment devices. The handbooks include Aesthetic Education Program findings and procedures, as well as assessment devices developed at the eight centers.

TIME REQUIREMENTS

The amount of time required will vary according to whether partial components are implemented or a total program is developed. Once it is ordered and manufactured, a learning environment could be installed in 2 days; courses/institutes can last from 3 days to a full term. Time requirements vary according to the scope of work decided upon by the site. The variations relate to the level of implementation, i.e., a partial or total program in aesthetic education. A complete AELC program can be estimated to take 2 years for total implementation.

IMPLEMENTATION PROCEDURES

A series of steps is followed in the installation of an AELC program: (1) The agency contacts CEMREL, expressing interest in the total AELC program or any of its components; (2) an initial meeting is scheduled for key personnel of the agency to discuss program implementation, e.g., the nature of the program, services provided, costs, responsibilities; (3) a second meeting is scheduled if necessary to answer questions and make presentation to other parties within the agency; (4) a decision is made for implementation and agreements are signed; (5) a specific time line is established and an agency staff is selected; (6) existing curriculums are assessed and an aesthetic education curriculum is designed; (7) instructional resources are determined and purchased; (8) a learning environment is installed; (9) staff development training (e.g., administrator seminars, curriculum development workshops, instructional resource familiarization workshops) takes place; (10) community involvement is determined and secured; (11) assessment and documentation procedures are established; (12) the program or component is implemented; (13) assessment and documentation of implementation take place; and (14) a final report, which includes recommendations for revision, and expansion is made.

Summary Cost Information

To install a total AELC program would cost approximately $60,000 over a 2-year period. Variations occur because of different factors, e.g., the size of a district, amount of instructional materials, number of learning environments. The cost cited is based on the above materials list.

ASSURANCES AND CLAIMS

Assurances

Since the testing of this product is not yet complete, only limited assurances and claims can be made at the present time. The testing is proceeding as defined in the *Basic Program Plan* (CEMREL, 1972) and the *Aesthetic Education Group Model*, (CEMREL, 1974). At the completion of the testing in November 1975, additional assurances and claims will be made, as appropriate.

Information gathered by careful observation and questionnaires at each of the eight AELC's indicates that no harm has resulted from the use of this product.

Plans and instructional materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such bias or inappropriateness of content is directed to qualified persons in order to consider how plans and materials should be revised to eliminate shortcomings that are identified.

Claims

At all stages of development, a national advisory committee of educational psychologists, educators, and arts educators reviews the substance and form of the plans, instructional materials, and information relevant to the actual operation of the centers. An evaluation by a person trained in field study techniques is carried on during the implementation of the centers in order to study their development and operation and to detect any shortcomings in the plans and materials or in their implementation. In that way inappropriate or harmful content can be corrected at an early stage. (See *The Aesthetic Education Group Model*, CEMREL, 1974.) In addition, the Aesthetic Education Program's instructional materials used in the Centers undergo separate evaluation as noted elsewhere in this catalog and as defined in the *Basic Program Plan* (CEMREL, 1972).

Based on preliminary information gathered, the following claims are made: (a) the centers and their components can be installed, and the installation is manageable in a variety of institutional settings; (b) the centers are able to undertake their own planning and programming after installation; (c) the centers can develop a diversity of approaches to inservice and preservice teacher education in aesthetic education; and (d) the centers can facilitate communication and cooperation among diverse educational and arts programs.

AESTHETIC EDUCATION

RD 010 041

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional resources for the classroom	1 set per 6 students	*		
Instructional resources for teacher education	1 set per student	**		
Learning environment	1 per classroom	**		
Handbook: *Installation of Aesthetic Education Programs in Schools*		**		
Interagency Models for Implementing Aesthetic Education		**		

*See catalog entries for CEMREL's Aesthetic Education Program packages.
**To be determined upon completion of testing.

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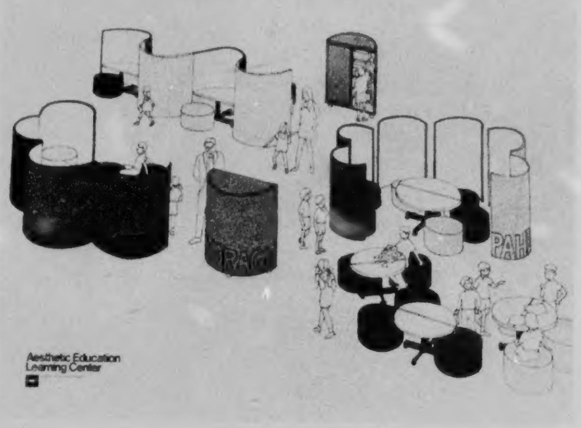
Sharon Bocklage, editorial Coordinator
Bernard S. Rosenblatt, Stanley S. Madeja, Rene David Michel-Trapaga and Dane Manis, Product Developers

AVAILABILITY

Learning environments, teacher/administrator training, student instructional resources, and consultant help are available upon contract; handbooks and teacher education resource units should be available by November 1975, as they are currently being tested. The materials will be copyrighted. Student materials are published by:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

The remaining components are distributed through:
CEMREL, Inc.
3120 59th St.
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF MARCH 1975 ■

ED 010 042

AESTHETICS IN THE EVERYDAY WORLD (WORKING TITLE) AND SHAPES (TELEVISION PROGRAMS) (PART OF THE AESTHETIC EDUCATION PROGRAM)

A program with the goal of having the viewer accept aesthetic values as important to human life and society

Just as human beings need social and political experiences, so they also need the aesthetic-experiences with intrinsic value and meaning which enrich life: A flawless blossom, a flash of comprehension, a painting which expresses a thought or an emotion. Through the ability to see and to create, each person can give a sense of order and a direction to life. Aesthetic values provide the necessary balance between one's rational mind and one's emotions. They draw deeply on the full range of resources within each individual.

Planning a television program on aesthetics grew out of the desire of the Aesthetic Education Program to introduce aesthetic values and their importance to a large general audience. The general goal of the program is to have the viewer accept aesthetic values as important personally and societally. Television suits this goal quite well because of its visual immediacy and mass-audience reach. It has a proven ability to attract and hold the attention of viewers, and it extends into every socioeconomic level.

The content for the program was selected on the basis of the concepts delineated by the Aesthetic Education Program over the years and the translation of those concepts into multimedia learning packages. The television program will be an aesthetic entity and will not merely "show" or "talk about" aesthetics.

As a prototype for the full 1-hour program, a 15-minute experimental video segment entitled *Shapes* was undertaken to explore the working relationship between CEMREL, Inc., and a national production facility. The premise of this experimental show was taken from three Aesthetic Education Program packages dealing with shape—*Shapes*, *Shape Relationships*, and *Shapes and Patterns*. When the feasibility of the working relationship had been established, production proceeded on the full 1-hour program.

Sample Segment

The opening of the show is "cold"—no opening titles are given, nor is theme music introduced. It opens on a bare stage. A female mime enters with the huge bag of junk she has collected. She dumps the bag and begins to sort through the contents. She inspects each object—touching, shaking for sound, sniffing, or occasionally tasting. The expressions are humorous as the woman gleefully accepts some items and dejectedly throws others into a reject pile.

The mime then begins to build a sculpture from the selected items. When the building is completed, the camera pulls back to reveal a whimsical junk sculpture depicting the five senses. (The sculpture used for this segment is being created by Robert Gilbert, the well-known sculptor shown in the Academy Award-winning documentary "The Magic Machines.")

Throughout the hour show, the 7-foot sculpture and the female mime are used to provide transitions and whimsy. The host, who is the balladeer, functions as a friendly storyteller who sums up the points being made.

The next segment will illustrate use of the five senses in a setting taken from the everyday world. First, the sights, sounds, tastes, and smells of the event are explored. Next, there is a kinetic segment to illustrate the relationship between aesthetics of everyday movements and movement in dance. Then, in the movement segment, various artists' interpretations of moments in movement are intercut. After the movement segment, there is a purely visual experience that explores movement, form, color, and texture.

SUBJECT AREA(S)

Sense perception, video art, visual arts, music, dance, literature, drama, and environment.

Aesthetics in the everyday world, use of one's senses in a special way to perceive aesthetic qualities in the world, the creative process in the everyday world, and personal decisionmaking pertaining to aesthetics are topics which are also included.

INTENDED USERS AND BENEFICIARIES

The target audience for this program is a general television-viewing audience which includes the classroom teacher and the parent of the schoolchild.

AESTHETIC EDUCATION

RD 010 042

GOAL(S) OR PURPOSE(S)

The purposes of the television program are for viewers: (1) To perceive the aesthetic dimensions of living—the aesthetic potential inherent in the use of all our senses; (2) to value such aesthetic movements, events, and happenings; and (3) to transfer or relate the perceiving and valuing of aesthetic moments into daily decisionmaking.

PATTERNS OF USE

The program will be available for general television viewing on national television networks and/or local television broadcast and will also be available on 16mm film. Designing the program for general audiences provides maximum flexibility for its use. It is the intent of the Aesthetic Education Program that the program be educational and entertaining to the general audience and be available for use as teacher training materials.

TIME REQUIREMENTS

The program will be 1 hour long.

IMPLEMENTATION PROCEDURES

The program will be entirely self-explanatory and will need no special introduction before it is shown.

ASSURANCES AND CLAIMS

Assurances

All products developed by the Aesthetic Education Program are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the program will cause an appropriately directed review of the content by a qualified person not connected with the project. The content will then be revised to eliminate such shortcomings.

Claims

Developmental evaluation of *Shapes* has shown that it is appealing to children in grades 2, 3, and 4, commanding good levels of visual attention and receiving a high enjoyment rating from them.

Evaluation of the major program to date has only been based on segments. No evaluation of a completed prototype has been undertaken. Although initial indications have been positive in regard to audience enjoyment, no substantial claim can be made at this time.

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Sharon Bocklage, Editorial Coordinator
Blythe Rainey Cuyler, Project Coordinator

Educational Audio-Visual Productions
9220 Sunset Blvd.
Los Angeles, Calif. 90069

N. Dann Moss, President
Sterling Johnson, Director of Television Program

WNET/Channel 13
New York, N.Y.

David Loxton, Producer
Shirley Gillette, Education Department Coordinator
Paula Rome, Production Coordinator

AVAILABILITY

Aesthetics in the Everyday World **is scheduled for completion on July 1, 1975.** ***Shapes*** **is complete, and both are copyrighted.** ***Shapes*** **is available from:**

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 010 043

THE FIVE SENSE STORE (PART OF THE AESTHETIC EDUCATION PROGRAM)

A traveling exhibit which provides students with a general introduction to the concepts of aesthetic education

The *Five Sense Store* is a traveling exhibit which illustrates the variety of experiences available to students who participate in the Aesthetic Education Program.

In the *Five Sense Store: An Aesthetic Design for Education* you can watch TV, play with a word picture puzzle, listen to a radio, stretch yourself in an elastic band, pile up styrofoam blocks to build your own environment. This three-part exhibit draws upon the environment and the arts to involve children in experiences of aesthetic choice and introduce new concepts in education and aesthetic awareness.

As a visitor to the exhibit you are first met by the kaleidoscope of sounds and images in today's sound/image society. Looking into large cylinders, you see television programs, listen to a radio, or hear a cacophony of sounds from our everyday environment. Images narrow your focus to the use of these same media in the schools.

You see that children are the receivers of information through the technological hardware and they are creators through the media. You see students using cameras, working computers, listening to tapes, editing film—the range of media in classroom and studio situations. A large panel confronts you with some serious questions: How much are children allowed, even encouraged, to use the media? How can their experiments with technology be made more involving? How can we help them really use the technology, come to value it, and, ultimately, affect the quality of the sound/image society itself?

Specifically, how can aesthetically designed instructional materials that use the technology be created? This question brings you to a long, serpentine wall that graphically shows the process of developing aesthetic education materials. Starting with the content, an idea is built into instructional materials that are tested, revised, and used by children in the schools. Along with this graphic visualization you hear taped interviews with students and teachers and see slides of children working with aesthetic education program materials.

SUBJECT AREA(S)

An aesthetic design for education: The arts.

The *Five Sense Store* provides a general introduction to the concepts of aesthetic education. The activity stations within the exhibit allow the students to feel textures, to write plays, to express emotion through dramatized body movements, to create new word combinations, to make visual compositions with shapes, to examine a photographer's point of view, to arrange a musical composition, and to design a personal space. A tour through the exhibit would serve as an appropriate introduction to any of the Aesthetic Education Program age materials or may be used to develop a general awareness of aesthetics in those communities where the materials are not being used in the schools.

INTENDED USERS AND BENEFICIARIES

The exhibit is designed for participation of children from age 5 and older. Adults, as well, enjoy the exhibit and profit from it; not only do they have the opportunity to see what is available in aesthetic education for children, but for many of them the exhibit may also be a first exposure to aesthetics.

GOAL(S) OR PURPOSE(S)

The purpose of the *Five Sense Store* is to: (1) Show a model for developing instructional materials which fill the need for using modern technology and design techniques in a quality way; (2) demonstrate the materials of the Aesthetic Education Program; (3) emphasize that aesthetic considerations should be an integral part of the development of all instructional materials—books, films, charts, etc.; and (4) make available to museums a traveling exhibit which can serve as a launching pad for new ideas in arts education.

PATTERNS OF USE

The Five Sense Store is a self-contained traveling exhibit with a large variety of activities that are taken from the experiences offered in the Aesthetic Education Program materials. It may be used by museums and other institutions that wish to offer their communities an opportunity to experience new ideas in arts education. The exhibit serves as a participatory display for children of all age levels, giving them an initial exposure to aesthetic education; as a source of information for adults, creating an aesthetic awareness of their environment; and as a training center for teachers, giving them the opportunity to examine various concepts in arts and aesthetic education.

ASSESSMENT PROVISIONS

The first public opening at the National Collection of Fine Arts in Washington, D.C., was a test site. Because of the variety of cities the museum travels to and the differences of intent by each sponsor, CEMREL does not furnish standard evaluation. However, each site has provided for its own evaluation plan. The information is then furnished to CEMREL and the Smithsonian Institution Traveling Exhibition Service (SITES).

TIME REQUIREMENTS

A minimum of an hour and a half is required for students to go through the exhibit. More time will be needed when children wish to take part in all of the activities.

IMPLEMENTATION PROCEDURES

Museum staff, docents, and teachers who will be involved in conducting tours through the *Five Sense Store* should study the *Five Sense Store Handbook*. Workshops may be planned previous to the opening of the exhibit to acquaint the staff with the exhibit. A section in the handbook gives guidance for what should be covered in such workshops.

The *Five Sense Store* requires a rather large area in for which to be exhibited. It is designed to be set up in three rooms: Room 1 deals with an aesthetic design for education; room 2 is the activity area and allows for participation; room 3 is the space place and allows for personal involvement in designing a space.

CEMREL recommends approximately 4,500 square feet for the exhibition: Preferably divided into 1,500 sq. ft. in each of three rooms.

Approximately 2 groups of 20 to 30 children can be handled in the 2 activity areas in 20-to 30-minute sessions.

Audiovisual equipment is provided with the exhibition as an integral part. Maintenance required is limited to replacing bulbs and to the original wiring for each installation. Refurbishing is done on a yearly basis.

The *Installation Guide* describes processes to install the sound-image society and activity stations, and CEMREL personnel are available to install the space place.

The *Handbook* provides procedures for adults who will be staffing the activity stations and the space place.

Students of kindergarten age and up are able to deal with any of the activities unless there is a specific note to the contrary given in the guidelines for that activity.

Personnel Required for Product Adoption and Implementation

Because of the unusual nature of this exhibit, its optimum success depends on the efforts of well-prepared museum staff and docents and well-oriented teachers. A minimum staff is 4 adults to 30 students. The staff should be prepared through workshops which are described in the handbook.

ASSURANCES AND CLAIMS

Assurances

The first public opening at the National Collection of Fine Arts in Washington, D.C., was a test site. Both CEMREL and the Smithsonian used this location to evaluate and revise the exhibit. Changes to make the exhibit more durable and transportable were made after the trial opening.

Since being revised, it has traveled to eight additional sites and has had relatively no trouble adapting to any situation or environment. Although the *Five Sense Store* is a singular unit designed to travel, the modular "furniture" has been adapted to the aesthetic education learning centers, confirming that it could be replicated if desired.

At present, the developers have not received any reports of harm associated with the use of this exhibit. Also, the materials used in the *Five Sense Store* were carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

Claims

The major claim to be made about CEMREL's *Five Sense Store* traveling exhibition is that it is the only one of its kind that allows children and adults a "hands on" relationship with aesthetic education materials in various community settings.

The exhibit broadens knowledge of aesthetic education. Teachers and students responded enthusiastically to the exhibition, tying it back to instruction in the classroom. For children the exhibit is self-motivating and self-directed. It is an excellent training program for teachers and teacher education students. It explains techniques of research and development of educational products.

The exhibit offers children opportunity to experience aspects of dance, theater, photography, and visual arts.

Although intended for a 2-year tour, because of requests the exhibit's schedule has been extended a third year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Five Sense Store				
Rental fee for six weeks	1 per exhibit	800.00		
Shipping cost		1,000.00		
The Space Place	1 per exhibit			
Styrofoam blocks		300.00 to 500.00		
Fee for specialist to install exhibit		200.00		
Transportation fee for specialist		200.00 (minimum)		
Handbook to the Five Sense Store	1 per tour guide	4.00	Reusable	

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Sharon Bocklage, Editorial Coordinator
Stanley S. Madeja, Robert Falk, Nadine J. Meyers and Edward Sweda, Product Developers

AVAILABILITY

The *Five Sense Store* is available from the Smithsonian Institution. Order from:

Smithsonian Institution Traveling Exhibition Service (SITES)
Smithsonian Institution
Washington, D.C. 20560

INFORMATION CURRENT AS OF MARCH 1975.■

RD 010 044

SWRL SONG RETRIEVAL SYSTEM

An integrated, computer-assisted system to locate or analyze songs with desired characteristics

Locating songs with desired characteristics or analyzing a repertoire of songs according to music characteristics has heretofore been a "search and seek" art. The *SWRL Song Retrieval System* (SRS) makes it possible to do this efficiently and replicably. SRS is an integrated system of five components: A code book, an analyst training guide, data files, computer program package, and a hard copy file.

The code book is a checklist of concepts which collectively may be used as descriptors in distinguishing songs. The concepts are organized by variables such as meter, scale, range, and origin. The analyst training guide provides instruction in the use of the code book as well as definitions for each musical concept listed there. Data files include the repertoire of songs available for analysis. The Computer Program Package includes a retrieval program, an update program, and a translator program. The hard copy file is output information generating the identification numbers of all songs satisfying the request criteria involved in the analysis.

The data files currently include 4,500 songs obtained from 71 sources that include songs generally considered appropriate with elementary school age children.

SUBJECT AREA(S)

The subject area is music.

INTENDED USERS AND BENEFICIARIES

The intended users are music researchers and educators.

GOAL(S) OR PURPOSE(S)

The goal of this program is to locate songs with desired characteristics or to analyze a repertoire of songs according to music characteristics.

PATTERNS OF USE

Users may form their own repertoire of songs or use extant data files. The computer software is transferable to other computer configurations.

IMPLEMENTATION PROCEDURES

SRS is currently resident at the computer centers of SWRL and UCLA. Interested inquirers may use the system by telecommunication or batch mail.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
User's manual	Access by user	5.00	Archival	
Computer software	Access by user	Public domain		

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

SWRL claims common-law copyright on the materials. The *SWRL Song Retrieval System* is asccessible at the SWRL and UCLA computer centers, and computer software is available for installation on other configurations.

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INFORMATION CURRENT AS OF MARCH 1975 ■

BASIC SKILLS

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Mathematics and Science
*Reading and Language Arts
Reasoning and Problem Solving

OVERVIEW

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and

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The quality of mathematics and science[1] education has received widespread attention in the past 20 years. Some mark the beginning of national interest in science and technology to 1957, in response to the launching of the first Soviet satellite, Sputnik I. The Physical Science Study Committee (PSSC), which began its work formally in 1956, heralded the era of sweeping curricular reform and served as a model for early efforts in educational innovation. Within the period 1956-74, over 200 noncommercial programs in science and mathematics have been in operation in the United States. The evolution of thought and accomplishment in these fields can be studied in the *Ninth Report of the International Clearinghouse on Science and Mathematics Curricular Developments*, a joint project of the American Association for the Advancement of Science and the Science Teaching Center of the University of Maryland.[2]

The height of activity in curriculum development occurred in the mid-1960s. Included in the first generation of federally supported projects were the School Mathematics Study Group (SMSG), the University of Illinois Committee on School Mathematics (UICSM), the Madison Project, the Minnesota Mathematics and Science Teaching Project (MINNEMAST), and the Arithmetic Project, to name just a few. Although each of the projects was unique in its outlook and philosophy, the reform that was initiated was viewed as a single phenomenon: "The new math." Textbook series and State and local curriculum guides reflected the changes in mathematics teaching with varying degrees of success. Interpretation and analysis of the subject received local and nationwide exposure. Public debates over the merits of the new programs and cries for evidence of their success in terms of raised achievement test scores continue to occur, even as a second wave of curriculum programs is under development. Critics advocate a back-to-basics approach which emphasizes computational skills.

Although "the new math" is a catchall term for the two-decade reform in school mathematics, it should be understood that the curriculum projects represented many different and even opposing views of what should be included in an ideal curriculum. "Using the phrase 'New Math' to describe this era," says the National Advisory Committee on Mathematical Education (NACOME), "gives it the nature and flavor of such phrases as 'The Roaring Twenties' or 'The Great Society'."[3]

The introductory and trends section of this overview was developed by Ms. Phyllis R. Klein, who is a teacher educator and elementary mathematics curriculum developer, formally Coordinator of Teacher Education, The Comprehensive School Mathematics Program, CEMREL, Inc.

The overview section describing products funded by the National Institute of Education was prepared by Dr. Edward Esty, Research Associate, Basic Skills Group, National Institute of Education, Washington, D.C.

The major task before school decisionmakers is one of reassessment: Which aspects of the curriculum reform will best meet the current and future needs of the students they serve?

Review of research developments

If any generalizations can be applied at all to the work of curriculum projects in the past two decades, it can be safely said that the emphasis was on the understanding of mathematical processes rather than on the rote memorization of isolated facts, that the study of mathematics was to be considered a unified whole, and that the content was to include more than just the manipulation of numbers. *Goals for School Mathematics*, the 1963 report of the Cambridge Conference on School Mathematics, advocated substantial enrichment of the entire school program from kindergarten through secondary school. The recommendations for the K-6 curriculum included topics such as geometry, probability and statistics, functions, graphs, equations and inequalities, the algebraic properties of number systems, and work with logic and sets. In the intervening years since the *Goals* report was issued, these content changes have been slow to appear in texts and curriculum guides, if they have appeared at all.

Which aspects of the reform movement, then, have been incorporated into school mathematics? For one, the term

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[1] Because all but three of the products described in this section are mathematics related, this overview focuses on developments in mathematics instruction.

[2] Periodic summaries of the ongoing research and development activities in mathematics education can be obtained from such sources as the *Yearbooks* of the National Council of Teachers of Mathematics, the *Arithmetic Teacher*, the *Mathematics Teacher*, and the *Journal for Research in Mathematics Education*. Additional periodic reviews of various aspects of mathematics education are the *Mathematics Education Reports* available from the ERIC Information Analysis Center for Science, Mathematics, and Environmental Education (Columbus, Ohio 43212). A good review of the status of mathematics education in this country is the recent *Overview and Analysis of School Mathematics, Grades K-12*, which was prepared with NSF support and is available from the Conference Board of the Mathematical Sciences (Washington, D.C. 20037).

[3] Hill, Shirley, et al. *Overview and Analysis of School Mathematics, Grades K-12*. Washington, D.C.: Conference Board of the Mathematical Sciences, 1975, pp. 21-22.

"arithmetic" has been replaced by "mathematics." Historical systems of numeration and counting in number bases other than 10 became popular ways to begin each year's study. The vocabulary of set theory found its way into books, even in first grade, where addition, for example, was presented in terms of forming the union of two disjoint sets of chickens. The commutative, associative, and distributive properties were to be found in vocabulary lists of elementary school texts, although their useful aspects in computation were frequently ignored. Varying amounts of geometry, probability, functions, and graphs were also present in texts. But the actual impact of the innovations in curriculum "has been modest relative to expectations."[4]

In 1975, the National Council of Teachers of Mathematics commissioned a survey of second- and fifth-grade instructional practices. The 1,200 responses from teachers of these grades showed that textbooks, objectives, and testing programs with which they were familiar emphasized computation with whole numbers and fractions, concepts of number and operations, and problem solving and measurement. The teachers judged that relatively little class time was devoted to geometry, metric skills, graphs, statistics, probability, and relations and functions. These topics were most often skipped so that more time could be spent on "computational skills that are comfortable and valued by elementary teachers."[5]

In recent years, the mathematics reform movement has come under severe attack. Perhaps the most outspoken of the critics has been Morris Kline, professor of applied mathematics at New York University. Kline has criticized innovative programs for what he considers inappropriate content and undue emphasis on abstraction, terminology, and symbolism. His views have been both supported and challenged in professional journals and the popular press. Many mathematics educators believe, however, that such polarization ("old or new, skills or concepts, concrete or abstract, intuitive or formal, inductive or deductive[6]) is fallacious and can only seriously hamper the understanding of the spirit and accomplishments of recent innovations.

The National Assessment of Educational Progress released their findings on mathematics achievement in the summer of 1975, based on tests administered in 1972-73 to members of the elementary school, junior high school, secondary school, and adult population. While the results do not provide a definitive statement on school mathematics achievement, the "results on computation do not confirm charges that basic skills seriously deteriorated during the 'new math' era." On the other hand, the results do "suggest the need for greater attention to understanding basic concepts in topics like measurement and problem analysis."[7]

Patterns of instruction, as well as content, have undergone change. Several curriculum projects advocated the changeover from whole group instruction to alternative method of instruction. These included, either alone or in combination, individual or small-group instruction based on activity packages, task cards or instructional booklets; laboratory-centered instruction based on manipulative materials; or computer-assisted instruction.

Together with changing patterns of instruction came conflicting views about structuring the mathematical experience. Two mutually exclusive approaches have evolved. One approach is to consider the content of mathematics as a fixed entity which is composed of atomized elements. Proponents of this philosophy claim that mathematical content can be organized into a hierarchy of skills for which precise behavioral objectives can be constructed. Through a series of small steps, taken one at a time, students can make their way through mathematical content, progressing to the next level of skills only after they have shown competence in the previous level. The advocates of humanistic education believe that mathematics is a unified whole and that students should have exposure to many of the facets from their very earliest study of the subject. The proponents of this school believe that students' creativity can be stimulated by exposure to open-ended problems in somewhat of a spiral approach. As students progress, they encounter more and more sophisticated situations and begin to acquire an ever-deepening knowledge and appreciation for the interrelationship among mathematical ideas far beyond any discrete situation.

Implications for research and practitioner needs

The implications for research are manifold, both in terms of content and the ways in which it is taught. Among the needed curriculum improvements cited by the NACOME report are:

- Curriculum revision or reorganization in the light of the increasing significance of computers and calculators;
- Revision of the program in light of the increasing use of the metric system in measurement; and
- Integration of statistical ideas throughout the curriculum in an effort to increase general ability to collect, organize, interpret and understand quantitative information.

The NACOME report urges continuing attempts to find sound empirical bases for the recommendations of ongoing curriculum programs, as well as comparative studies of alternative programs. Ways must be found to teach students of all mathematical abilities. Furthermore, research is needed on objective means for identifying the characteristics of effective teaching. As with all new curriculum programs, serious attention must be paid to what is actually taking place in the classroom. Not only must the proverbial gap between theory and practice be eliminated, but it is absolutely essential that teachers receive quality inservice education which will enable them to teach the ideas in these programs effectively.

At the local school level, decisionmakers will need to find answers to some very practical questions. Which patterns of instruction are likely to work best with the population the school serves? Which philosophical view—behavioristic or humanistic—is likely to result in mathematically competent students? Should some or all of the recommendations of the *Goals* report of the Cambridge Conference be adopted in their school? What learnings will be necessary now that hand calculators have become increasingly available? How to teach students to become wise consumers? How to prepare for the imminent changeover to the metric system? How to provide inservice training and support for teachers? And the ultimate question that must be faced: If the back-to-basics movement does indeed prevail, what *is* basic to mathematical literacy?

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[4] *Ibid.*, p. 21.

[5] *Ibid.*, p. 11.

[6] *Ibid.*, p. 21.

[7] *Ibid.*, p. 118.

NIE activities in mathematics and science

At the present time, most of NIE's activities in mathematics and science are being carried out in various educational laboratories and centers. NIE supports a wide range of curriculum development efforts in mathematics, primarily at the elementary school level. Brief descriptions of these efforts follow.

At CEMREL, the Comprehensive School Mathematics Program (CSMP) is developing a K-6 program, designed for all ability levels, which is unique in its emphasis on the mathematical notions of relations and functions. Also, CSMP has finished another, completely separate, program written for very able and highly motivated students in grades 7-12.

Another K-6 program, called Developing Mathematical Processes, is nearing completion at the Wisconsin Research and Development Center for Cognitive Learning. The DMP program emphasizes work with manipulative materials, making a gradual transition to more abstract representation. Through numerous measurement activities the connection is made continually between mathematics and the physical world.

The Learning Research and Development Center has both the well-known individually prescribed instruction (IPI) program in mathematics for grades K-6, and a program called individualized mathematics (IM) for the early elementary grades. IM is similar to IPI with the addition of a multitude of manipulative activities. Also, the IM program uses a hierarchical organization of objectives and instructional units that makes possible an individualization of students' paths through the program. The individualized science (IS) program is designed to develop scientific knowledge and facilitate scientific inquiry in children in grades 1-6.

The Southwest Educational Development Laboratory is working on the exploring number concepts program, which is designed for kindergarten and first-grade pupils of low-income backgrounds. The distinctive features of this program include heavy use of manipulatives, a continuous progress organization, and extensive use of cassette tapes which reduces to a minimum the need for children to read instructions.

Research for Better Schools, Inc., another education laboratory, is developing a program for grades 7 and 8, called individualized middle mathematics. The program is based on a carefully ordered hierarchy of objectives, but is designed to allow a certain amount of student choice in determining which sequence to follow.

The Southwest Regional Educational Laboratory (SWRL) has two programs that are related to mathematics, both based on materials commercially available from other sources. One of these is the learning mastery system (LMS), which is designed to give teachers a tool to manage instruction using a specific existing text series. LMS examines such a series and determines which of certain skills should be mastered. It then provides tests for those skills, and exercises that review or supplement the skills. SWRL is also developing a proficiency verification system (PVS), with information on the effectiveness of certain instructional programs in terms of the proficiencies of students, and also the degree to which these proficiencies match the aims of the developers.

Mid-continental Regional Educational Laboratory has established a similar product for use in high school biology programs. The inquiry role approach (IRA) provides a set of teacher training materials, and teacher and student materials to facilitate progress through a series of activity modules centered on a research theme. The Learning Research and Development Center has produced a similar set of films and teacher guides which supplement teaching of the biological and physical sciences in grades 1-6.

STORIES BY FREDERIQUE (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

Twenty-two stories for children (ages 5 to 14) designed to introduce fundamental mathematics concepts in an appealing manner

This collection for young people consists of 22 mathematical stories, each of which is presented in the format of a newspaper for children. Each story is printed in color on tabloid-size newsprint (17-1/2 by 11-1/2 inches) and is intended to appeal to youngsters in the 5- to 14-year-old range. The stories are completely independent of each other and need no external explanation. They may be used for individual or collective reading, at home or at school.

Each of the stories is portrayed by means of the mathematical languages of arrows, dots, and strings which reinforce the ideas of the story. One story ("Two By Two") also uses the language of a binary-decimal abacus. The versatility of these nonverbal languages is exploited as much as possible.

The young readers are personally involved in each story. They have to answer questions and use their imaginations to invent additional adventures for the characters of the story. They learn that there is room in the make-believe world of mathematics for exercising the aesthetic sense and for expressing emotions.

Nine of the stories are intended for very young children (5 to 8 years of age). Here the focus is on the anecdotal aspect of the story. One of the goals of these nine books is to make the children familiar with the nonverbal mathematical languages and to leave them with the impression that these languages are as natural and useful as their regular language.

Nine other stories concern numbers and their relationship with the world. These particular stories are about a boy and some of his friends who just happen to be numbers. The personification of numbers allows the introduction and use of "games" of mathematics through one of the most important domains of childhood—the world of fantasy. Free from usual constraints often placed upon them, the numbers invent marvelous games and dance to the tune of vividly colored arrows. These games are never frivolous. There are rules to be followed; and as a result, orderly patterns emerge as the numbers play or dance.

Of the remaining four stories, two are detective "novels" introducing some interesting mathematical problems; one concerns the elementary use of quantifiers in logic; and one emphasizes the various and very different aspects of just a simple straight line.

SUBJECT AREA(S)

Mathematics and the creative process: Introduction of some fundamental concepts of mathematics, how they combine with each other, how they react with the "real world," and how they are expressed in different graphical, calculative, and usual languages.

INTENDED USERS AND BENEFICIARIES

All youngsters ages 5 to 14. Some of the most simple stories have been used successfully with mentally handicapped children, trainable as well as educable.

GOAL(S) OR PURPOSE(S)

The purpose of this collection of stories is: (1) To provide reading pleasure for young people by presenting them with some handsome, living, and useful aspects of the mathematics of today in a fanciful make-believe setting; and (2) to give youngsters an opportunity to enjoy the aesthetic aspect of mathematics, its expressions and its languages.

PATTERNS OF USE

These storybooks are intended for both the trade market (bookstores, supermarkets, or department stores) and the school market. In the former case, parents should use the books the same way they use other books bought for their children's reading pleasure. If they are purchased for school use, they can be used as a supplement to the mathematics curriculum, as part of the reading curriculum, or as a link between the two.

The CSMP elementary school curriculum for grades K-3 makes extensive use of this collection as an integral part of its instructional program. Teachers who wish to use some of these stories in their mathematics or reading programs, but who do not have the specific CSMP lessons to which they may relate, may obtain copies of the specific lessons in question by writing to CEMREL, Inc.

ASSESSMENT PROVISIONS

Since the major goal of these books is to provide reading enjoyment for children, no formal testing is used. Parents and teachers should be able to determine whether the books appeal to their children by the reactions of the youngsters as they read and discuss the stories. The success or failure of this collection ultimately rests with the satisfaction of the customer, i.e., the children themselves.

TIME REQUIREMENTS

As with most children's literature, the time required to read a book varies from child to child. Youngsters often read their favorite books over and over again. When used in the classroom, most of these books can provide activities for one to three full-period lessons.

MATERIALS AND EQUIPMENT

No special equipment or personnel are required.

Each booklet sells for $0.35. Discounts are available for quantity orders. Price is subject to change.

ASSURANCES AND CLAIMS

Because of the nature of this product, the issues of potential harmfulness has not been explicitly investigated. No reports of harmful results have been received from previous users of this product. All of the instructional material is carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. All shortcomings of this type are eliminated upon discovery.

These stories have been used informally by teachers in the classroom, by parents in the home, and by students on an independent basis. They have also been used by teachers of mentally handicapped children. The reactions by users and children have been very favorable. No systematic evidence regarding the use of the materials has been gathered. Aside from the day-to-day feedback from students during the development of these stories, no formal pilot tests have been conducted.

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Burt Kaufman, Program Director
Frederique Papy, Associate Director of Research

AVAILABILITY

The books are copyrighted and are available from:
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3120 59th St.
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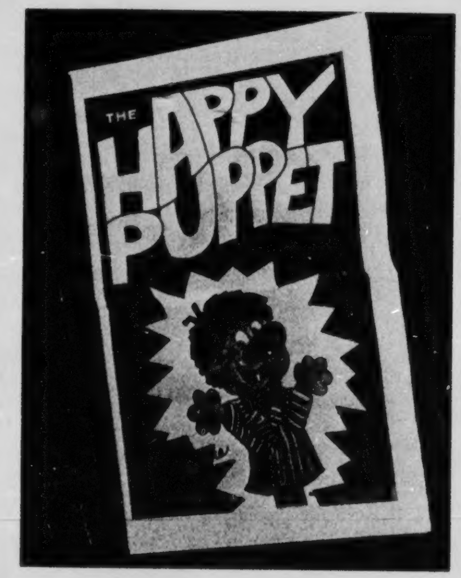

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 002

FILMS OF TWELVE DEMONSTRATION CLASSES TAUGHT BY FREDERIQUE (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

A film series demonstrating a functional-relational approach to elementary school mathematics

This product consists of a film series showing Frederique Papy teaching a variety of CSMP lessons to first grade children. The films are all 16 mm, with sound and color, and run from 13 to 15 minutes. There are study guides for each film consisting of suggestions on what to look for while viewing the films, as well as some general questions for discussion after the film has been shown.

By viewing these films and participating in the discussions suggested by the accompanying study guides, elementary school educators (teachers, administrators, elementary education students and faculty at universities, etc.) can gain an awareness of a new approach to elementary school mathematics as represented by the CSMP elementary school curriculum. Since the children in the film are actually involved with the new content and pedagogy of the CSMP curriculum, the viewers can form a much better opinion of the appropriateness of this program for Kindergarten and first-grade children than they could by just scanning the instructional materials alone.

The CSMP elementary school program is based on a humanistic philosophy of education, a functional-relational approach to mathematics, and a pedagogy of situations. The functional-relational approach to mathematics assumes that mathematics has a subject matter—mathematical object—and that any effective study of mathematics consists largely in discovering relationships between these objects and then using these discoveries to solve interesting problems. Among the most important of the mathematical objects are those called *functions*, or *mappings*. The functional-relational approach can start in kindergarten since no formal language is necessary. A picture language, consisting of large and colorful arrow diagrams, is sufficient to illustrate the relational notions. The feasibility and desirability of this approach has been adequately demonstrated by the highly successful work of Madame Frederique Papy, of the Belgian Center for the Pedagogy of Mathematics. The humanistic philosophy and the functional-relational approach combine especially well with a pedagogy of situations in which the imagination of the children is captured by an easily imagined situation presented to the children.

The CSMP elementary program is a comprehensive one in which the situations presented to the children involve language and logic; sets, relations, and functions; combinatorics; algebraic structures; geometry; arithmetic calculation; and probability and statistics.

SUBJECT AREA(S)

In the chart below, each of the films is categorized in terms of the CSMP content strand and also in terms of the nonverbal languages which are employed in that particular lesson. The grade level is also indicated, but it should be noted that these films were made with the children during the summer, after they had completed the indicated grade level.

INTENDED USERS AND BENEFICIARIES

Students in elementary education classes (graduate and undergraduate) studying mathematics curricula for elementary schools, and teachers being trained to teach the CSMP elementary school program.

GOAL(S) OR PURPOSE(S)

(1) To be aware of the existence of the CSMP elementary school curriculum, and (2) to discuss some of the unique content and pedagogical methods employed in the filmed lessons.

PATTERNS OF USE

The films can be viewed in any order as they are completely independent of each other. The accompanying study guides can be used to focus attention on certain aspects of the lesson before viewing the films and to guide the discussion after watching them.

This product can be used on a supplementary basis in an inservice or preservice course on elementary school curricula.

RD 020 002

ASSESSMENT PROVISIONS

There is no formal testing.

TIME REQUIREMENTS

Each film runs approximately 15 minutes. The amount of time needed for discussion following each film will vary according to the needs and interests of the viewers.

IMPLEMENTATION PROCEDURES

No special procedures required.

Summary Cost Information

Each film can be purchased or rented. The purchase price is $100 per film and the rental price is $15 per week plus postage. Single copies of the study guide for each film can be purchased for $0.25.

Personnel Required for Product Adoption and Implementation

No special personnel required.

ASSURANCES AND CLAIMS

Because of the nature of this product, the issue of potential harmfulness has not been investigated explicitly. No reports of harmful results have been received from previous users of this product.

All of the instructional material is carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. All shortcomings of this type are eliminated upon discovery.

These films have been used by CSMP in the training of CSMP coordinators. Many of the coordinators have then elected to use these films in their local school districts during the training of beginning CSMP teachers who are teaching CSMP as part of the field test of CSMP materials, as noted in the product description titled "CSMP Elementary School Program (K-3)."

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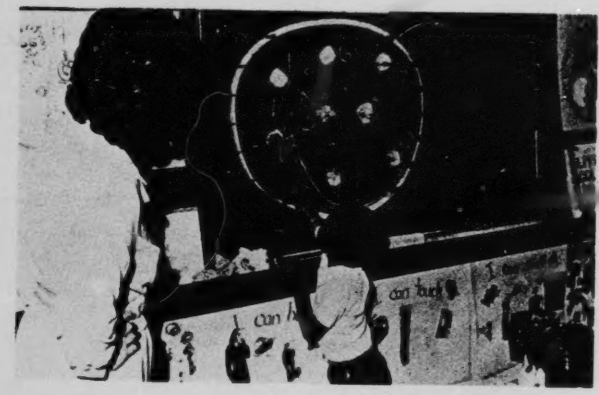
Frederique Papy, Associate Director for Research

AVAILABILITY

The films and the study guides carry a 1972 copyright and are available from:

CEMREL, Inc.
3120 59th Street
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF MARCH 1975 ■

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AN INTRODUCTION TO MATHEMATICS OF GRADES K TO 2 (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

A textbook for teaching elementary mathematics education at the undergraduate level of training

This is an 85-page textbook for an elementary mathematics education course at the undergraduate level. The content of this book includes all the topics of the CSMP K-2 curriculum, as well as a discussion of the pedagogical principles involved. An elementary education student who has successfully studied this course should be well prepared to teach any primary mathematics program, as well as the CSMP curriculum.

The CSMP elementary school program is based on a humanistic philosophy of education, a functional-relational approach to mathematics, and a pedagogy of situations. The functional-relational approach to mathematics assumes that mathematics has a subject matter—mathematical objects—and that any effective study of mathematics consists largely in discovering relationships between these objects and then using these discoveries to solve interesting problems. Among the most important of the mathematical objects are those called functions, or mappings. The functional-relational approach can start in kindergarten since no formal language is necessary. A picture language, consisting of large and colorful arrow diagrams, is sufficient to illustrate the relational notions. The feasibility and desirability of this approach have been adequately demonstrated by the highly successful work of Madame Frederique Papy of the Belgian Center for the Pedagogy of Mathematics. The humanistic philosophy and the functional-relational approach combine especially well with a pedagogy of situations, in which the imagination of the children is captured by an easily imagined situation presented to them.

Extensive use is made of the Papy Minicomputer, an elegantly simple and ultrainexpensive paper device which enables very young children to successfully encounter nontrivial calculations which might otherwise be far beyond their grasp. The teacher-directed K-2 curriculum is supplemented by independent study involving individualized workbooks, audiotapes, manipulatives, worksheets, and games. The lessons for 3d grade and beyond also use this multimedia approach but make increased use of the children's developing reading ability and place greater emphasis on independent study.

The CSMP elementary program is a comprehensive one in which the situations presented to the children involve language and logic; sets, relations, and functions; combinatorics; algebraic structures; geometry; arithmetic calculation; and probability and statistics.

SUBJECT AREA(S)

This book deals with the mathematical content of the CSMP primary school curriculum. Chapter titles and page lengths are:

1. The Language of Strings and Arrows (16 pages)
1.1 Dots, Strings, and Arrows
1.2 Situations Described by Dots, Strings, and Arrows
2. The Minicomputer (10 pages)
2.1 Introduction
2.2 Standard Representation
2.3 Minicomputer "Plays"
2.4 Addition in the Whole Numbers
2.5 Multiplication in the Whole Numbers
2.6 One Half of and One Third of
2.7 Subtraction in the Whole Numbers
3. From the Minicomputer to the Standard Algorithms (12 pages)
3.1 The Integers and Subtraction
3.2 Decimals
3.3 The White Square Game for Addition and Subtraction
4. Classifications and String Diagrams (6 pages)
4.1 More Examples of String Diagrams
4.2 Set Notations for String Diagrams
4.3 Conventions for String Diagrams
5. Relations and Arrow Diagrams (14 pages)
5.1 Relations
5.2 The Converse of a Relation
5.3 Composition of Relations
5.4 Functions
5.5 The Solution of an Open Sentence
6. Combinatorics and Probability (8 pages)
6.1 Counting Problems
6.2 Tree Diagrams
6.3 Early Experiences in Probability
6.4 Probability
7. Geometry (6 pages)
7.1 Taxi-Distance

7.2 Measurement and Incidence Geometry
8. Pedagogical Suggestions (8 pages)
8.1 The Spiral Development
8.2 Collective Teaching
8.3 The Lesson Plan Format
8.4 The Language of Strings
8.5 The Language of Arrows
8.6 The Language of the Minicomputer
8.7 Combinatorics, Probability
8.8 Geometry

INTENDED USERS AND BENEFICIARIES

Students in elementary mathematics education classes, elementary school teachers taking inservice courses, and elementary school teachers and supervisors being trained to teach the CSMP elementary school program are the intended users.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To learn the mathematical content of the CSMP primary school curriculum, (2) to be engaged in a pedagogy of situations, (3) to be prepared to teach any primary school mathematics program as well as the CSMP curriculum, and (4) to be aware of the existence of the CSMP elementary school program and the pedagogical principles upon which it is based.

PATTERNS OF USE

This book can serve as either a basic or supplementary text of a standard elementary mathematics education course. As such, the instructor is completely free to develop individual patterns of usage. To obtain maximum benefit from such a course, the developers recommend that the same pedagogical principles that underlie the CSMP curriculum for children be employed in the teaching of this course to adults. Problem sets and exercises are spread throughout the book, and a separately bound answer key is included with each copy of the text. The answer keys can be withheld from the students at the discretion of the instructor.

This book can also be used on a supplementary basis in an inservice or preservice course on elementary school curriculums.

ASSESSMENT PROVISIONS

There is no formal testing program. Presumably, student evaluation is an ongoing part of the instructor's activities. It is recommended that the instructor use the exercises and problem sets in the book as part of a continual assessment procedure.

TIME REQUIREMENTS

About 30 hours of instructional time are needed to cover adequately the contents of this book. This can be provided by the usual one-quarter elementary mathematics education course meeting 3 hours per week or in a more concentrated workshop format.

IMPLEMENTATION PROCEDURES

No special procedures are required.

Summary Cost Information

This book (including the separately bound answer key) costs $2.25 per copy. Each student needs one copy of the book which probably will not be reusable since it is printed on newsprint paper and has a softback cover.

Personnel Required for Product Adoption and Implementation

Instructors of elementary mathematics education courses should be able to teach this course without any special training.

ASSURANCES AND CLAIMS

Because of the nature of this product, the issue of potential harmfulness has not been explicitly investigated. No reports of harmful results have been received from previous users of this product.

All of the instructional material is carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. All shortcomings of this type are eliminated upon discovery.

This text has been used by CSMP in training CSMP coordinators, who in turn have used it in their local school districts as the basic text in the training of beginning CSMP teachers. That it has been used successfully in this regard is attested to by the success of these teachers in the field trial of the CSMP elementary program. As noted in the product description, titled *CSMP Elementary School Program (K-3)*, kindergarten and 1st-grade classes in 2 school districts began using CSMP materials in 1973-74. The next year, the number of classes from these same school districts increased to 448.

RD 020 003

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AVAILABILITY

The product carries a 1974 copyright and is available from:

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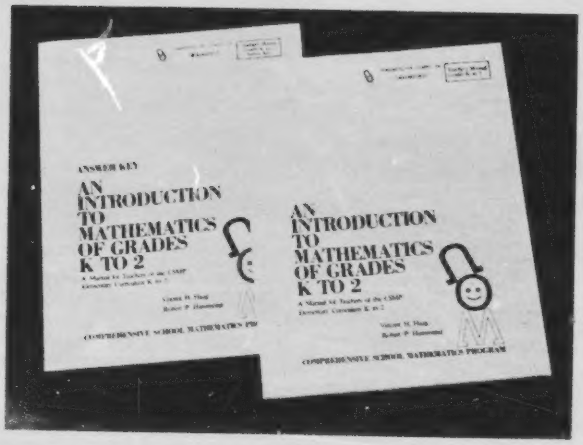
ANSWER KEY
AN INTRODUCTION TO MATHEMATICS OF GRADES K TO 2
COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM
AN INTRODUCTION TO MATHEMATICS OF GRADES K TO 2
COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 004

CSMP ELEMENTARY SCHOOL PROGRAM (K-3) (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

A program providing a complete mathematics curriculum for students in grades K to 3

The portion of the *CSMP Elementary School Program* described here provides a complete mathematics curriculum for all students in grades K to 3. Included are lesson plans for teachers, worksheets and workbooks for students, manipulatives, storybooks, supplementary materials for slow learners, and teacher training materials (manual for teacher trainers, textbook for teachers, and demonstration films).

The goals for the total K to 6 program include a development of the standard number systems (natural numbers, integers, rational numbers, decimals, and real numbers) and their operations interwoven with a two-pronged development of geometry. On the one hand, a rich variety of experiences in combinatorial and metric geometry are present throughout the program while, on the other hand, a carefully developed sequence of activities in affine (parallelogram) geometry is presented which highlights the geometrical interpretations of the number systems on the line, provides deep insights into the geometry of the plane, and eventually, the linkages between the number systems and the Euclidean plane. On an equal footing with the above, the CSMP K to 3 curriculum includes a strong component of probability, statistics, and combinatorics. Computational skills are not slighted. Students using the program can be expected to demonstrate proficiency in the skills at least as high as those taking a more traditional program.

The content uses the basic unifying mathematical ideas of set, function, and relation to provide the mathematical framework in which the content is developed. Powerful pedagogical devices are exploited, providing several nonverbal languages which render these underlying ideas accessible to very young (kindergarten and 1st grade) children. Through these languages, the children are able to apply mathematical ideas effectively and creatively to explore the content directly without wading through cumbersome, sterile terminology and notation.

The content is learned in an atmosphere of applications, from simple story situations in the early grades to challenging applications to nontrivial simulations of real world problems in the upper grades. The emphasis is at all times on a two-level approach to learning: Understanding the content itself and its applications, as well as understanding the techniques and processes of learning the content. It is the latter form of knowledge which gives the students the power to apply the former.

The program is based on a firm conviction that mathematics is a unified whole and should be learned as such. One of the results of this is the use of the spiral approach. CSMP content is sequenced in spiral form so that each student is brought into contact with each area of content continuously throughout the program. This approach consciously precludes atomizing the content and mastering each bit before continuing to the next. Rather, each student spirals through repeated exposures to the content, building interlocking experiences of ever increasing sophistication.

Another conviction is that no single method of classroom management suffices to meet the needs of every student. Hence, the program is constructed to allow numerous opportunities for whole class participation, small group participation, and independent individual study.

Particularly grades K to 1, and to a somewhat lesser extent in grades 2 to 3, while students are still struggling to become proficient in reading and writing their own language, the CSMP program is teacher directed—though not teacher dominated. The K to 1 and 2 to 3 materials are constructed to maximize teacher-student and student-student interaction. The students immediately begin to investigate mathematical concepts in concrete situations that are appealing and meaningful to them.

Individualization, at this level, is achieved through graded series of workbooks integrated into the basic sequence of lessons. Due to the spiral nature of the curriculum, each student can use a workbook series for a period of from 2 to 4 weeks without losing touch with the progress of the class and at the same time work his/her way up through the series according to growing capacity.

The content is not presented as an artificial structure external to children's experience and into which they are thrust, but rather as an extension of experiences that children have encountered in their development, both in real life and in fantasy. The child is led through sequences of problem solving experiences, presented in gamelike as well as story settings. Powerful nonverbal languages enable the children immediate access to the mathematical ideas and methods necessary, not only for solving these problems, but also for continually expanding their understanding of the mathematical concepts themselves.

SUBJECT AREA(S)

Mathematics for grades K to 3 organized according to the following content strands: Numerical games and algorithms; numerical relations; the languages of strings and arrows; geometry and measurement; probability, statistics, and combinatorics.

INTENDED USERS AND BENEFICIARIES

Students of all abilities in grades K to 3.

The developers believe that, with some minor adaptation, a major segment of this K to 3 curriculum would be appropriate for mathematically slow and below-average students in grades 4 to 8, as well as intermediate level educably mentally retarded students. This belief is based on positive feedback from several recent demonstration classes of such students conducted by CSMP staff members. The regular teachers of these classes, as well as many teachers in the audience, requested immediate help in providing an adapted version of the CSMP K to 3 curriculum for their use.

GOAL(S) OR PURPOSE(S)

The underlying belief on which the *CSMP Elementary School Program* is grounded is that the basic purposes of teaching mathematics at the elementary school level are: (1) To impart some important structures of rational thought; (2) to give students the capacity to mathematize a situation and solve interesting and challenging problems; (3) to awaken and needle the students' curiosity by constantly throwing challenges at them; (4) to teach students calculation; (5) to teach students how to formulate good questions; (6) to help students develop the capacity to decide upon the validity of a result by themselves, whether it be a calucation or a mathematical argument; and (7) to make the teaching and learning of mathematics aesthetically pleasing and intellectually satisfying.

PATTERNS OF USE

The teacher's guide for the CSMP kindergarten program consists of a variety of suggested activities organized into four sections according to content (relations; numbers; logic, language, classification; and geometry). A suggested sequence of lessons shows the teacher a way of spiraling and interweaving these four sections. However, the teacher is free to choose different sequences since there is very little dependence from one section to another.

The teacher's guide for the CSMP 1st grade program contains lesson plans for 308 separate lessons, many of them lasting only 15-20 minutes. There is also a suggested sequence list which teachers are encouraged to alter according to their needs. Lessons prerequisite to other lessons are clearly indicated.

The teacher's guide for the CSMP 2d and 3d grade programs is organized into six strands (numerical games and algorithms; numerical relations; the languages of strings and arrows; geometry; probability, statistics, and combinatorics; and workbooks). There is a suggested sequence for each strand. The teachers are encouraged to use a different strand on each day of the week during the school year. The two numerical strands and workbook strand should each occur 1 day each week; the other two strands should each occur 2 weeks out of every 3. There are 15 workbook series in grade 2, and 23 in grade 3, each of which is graded at 3 different difficulty levels.

ASSESSMENT PROVISIONS

Student evaluation should be an ongoing part of the teacher's daily activities. The workbook strand can serve as an effective evaluative instrument, used on a weekly basis. The more than 200 worksheets can be used diagnostically to help with daily planning. Special suggestions and materials are provided to aid the teacher with those students who are having difficulty even with the lowest level workbooks and worksheets.

TIME REQUIREMENTS

The CSMP materials for grades 1 to 3 comprise a complete mathematics curriculum for those grades. As such, 40-45 minutes per day should be devoted to this program. At the kindergarten level between 1 and 1-1/2 hours per week should suffice to complete all the suggested activities. However, if less time than this is available, a substantial part of the program can still be completed successfully.

IMPLEMENTATION PROCEDURES

The *CSMP Elementary Program* does not require a specialist teacher. The test group for the K to 2 segment totals about 18,000 students taught by regular teachers.

The 3d grade segment will be pilot tested during 1975-76. Since not all schools have kindergartens, the K materials are not prerequisite for successful use of the 1st grade materials. While the program was designed for the more typical single-teacher classroom, it has been very successfully taught in team-teaching situations, in cross-age-grouped classrooms, and in other variations of classroom organization.

Each school district implementing the CSMP elementary school program identifies a CSMP coordinator. The coordinators are given about two weeks of intensive training at a CSMP summer workshop to acquire the mathematical and pedagogical background necessary to install the program as well as to learn implementation and evaluation procedures. Upon returning to their school systems, the coordinators then conduct preschool workshops for all teachers who will be using the CSMP curriculum in their classrooms for the first time during the coming year. Optimally, the coordinator-led workshops provide a minimum of 8 hours of instruction for kindergarten teachers, 16 hours for 1st grade teachers and 24 hours for 2d and 3d grade teachers. The coordinator should also continue to support teachers during the year through inservice workshops, observation of classes, and general troubleshooting activities.

The experience of the developers, so far, has shown that the summer teacher training is needed, that there does have to be careful orientation of coordinators to the materials, and that followup visitations to teachers and workshops by the coordinators are helpful.

Field reports indicate that the nonconsumable materials last from 2 to 3 years before replacement is necessary. The field-test version of these materials was produced as cheaply as possible to keep initial costs as low as possible. It is assumed that for the eventual published version of this program, the nonconsumable materials will be more durable and of higher quality.

Summary Cost Information

Depending on the size of the class, student materials can be purchased in varying multiples of six. Each of the items needed for the program can be purchased separately. There is an approximate 10 percent saving by ordering a full classroom set of materials rather than item by item.

Personnel Required for Product Adoption and Implementation

Most regular classroom teachers can implement this curriculum, provided a coordinator is available to help with a modest amount of training and supervision. At present, workshops to train coordinators are provided each summer by CEMREL, Inc. Year-round consultation to participating school districts is also provided by CEMREL, Inc.

ASSURANCES AND CLAIMS

Assurances

Because of the nature of this product, the issue of potential harmfulness has not been explicitly investigated. No reports of harmful results have been received from previous users of this product. All of the instructional material has been carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any shortcomings of this type were eliminated upon discovery.

The program has been used successfully in many different kinds of school districts from large urban districts to small rural ones. Individual classes have encompassed wide ranges in ability, in socioeconomic status, and in racial composition. The program has also been used successfully in various classroom structures including multigrade use, team teaching, and small-group instruction.

Claims

The product has been very carefully developed. Each grade level of the program has been developed over a 3-year cycle of classroom experience beginning with the direct involvement of CSMP writers in teaching classes and culminating in the use of the materials by regular teachers under the observation, but without the assistance, of CSMP personnel. During this time, considerable information was obtained from both informal day-to-day feedback and more formal evaluation data collected by an autonomous evaluation group working with the program. During the whole of the development cycle, mathematicians and math educators assisted CSMP for extended periods of time, ranging from a month at a time to a year in residence.

As part of the summative evaluation of CSMP, reviews of program materials were conducted separately by five independent mathematicians and math educators recommended by the Mathematical Association of America as persons qualified to evaluate a mathematics curriculum. The reviewers found the content of the program to be sound, and generally liked the materials.

Users of the program have been favorably impressed. In 1973 a field trial was initiated in 138 kindergarten and 1st grade classes from 29 school districts. Questionnaire and interview data from teachers indicated that CSMP was overwhelmingly preferred to previously used mathematics programs on dimensions of student interest, achievement, and overall quality. The number of students using the CSMP program increased within the original sites, from about 4,000 in 1973 to about 13,000 in 1974.

The program is effective in promoting student learning. Controlled comparisons were made at the 1st grade level between 23 pairs of CSMP and comparison classes. On eight tests of standard 1st grade content, constructed from an analysis of five leading school texts independent of the content of CSMP, CSMP classes outperformed comparison classes on all but one test, significantly so ($p < .05$) on two of the tests. On each of three individually administered tests of cognitive skills in mathematics, CSMP classes had higher scores, though not significantly so at .05 level. On tests of specific CSMP content, administered to CSMP classes only (since much of the content was not taught to comparison classes), performance was judged at least adequate in each of the 12 content areas tested.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars*	Replacement Rate** and Cost	Source if Different from Distributor
Classroom set, including student workbooks and worksheets, manipulatives, teacher's guide, etc.	1 set per 30 students	K: 40.00 initially,	28.00 replacement set of consumables	
		1st: 175.00 initially,	110.00 for replacement set of consumables	
		2d: 160.00 initially, 3d: To be announced	135.00 for replacement set of consumables	
Textbook for training teachers	1 per teacher	2.25		

*Prices subject to change. **Workbooks and worksheets consumable yearly.

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AVAILABILITY

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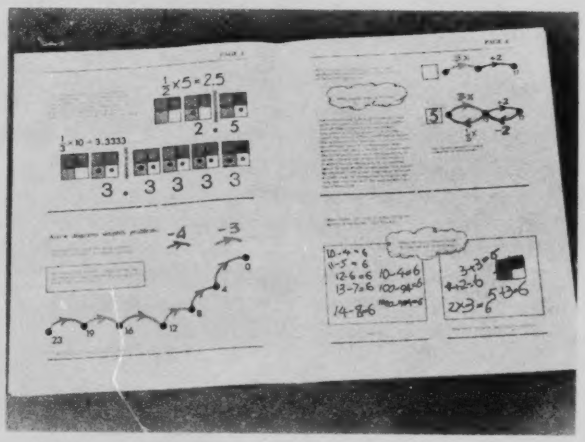

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 005

A SHORT COURSE IN PROBABILITY (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

A problem-oriented approach to probability for grades 7-12

A Short Course in Probability is a problem-oriented approach to discrete probability in which rather sophisticated situations are analyzed without any prerequisite theory. The course was created to introduce secondary school students (grades 7-12) to probabilistic thinking and problem solving without requiring a theoretical background in probability theory. The only prerequisite for this course is standard competence in the arithmetic of the positive rational numbers and positive decimals. The problem-oriented approach, as an initial introduction to probability theory, has several important advantages over a theoretical introduction: (1) It provides a strong motivation for a later theoretical course, (2) it provides the concrete foundations and examples needed for later abstraction, (3) it introduces students very quickly into one of the most important and dynamic areas of modern mathematical applications, (4) it permits students to work on interesting and challenging problems with a minimum background in mathematics and arithmetic, (5) it is practically void of sophisticated terminology and abstract notation which often stand as barriers between student and content, and (6) it permits a fast pace with maximum participation by students.

The course consists of a student text (115 pages) and an answer key for the teacher. Five lessons given to a group of 10 7th-graders when this course was being developed were video taped from which 2 sets of black-and-white kinescopes were made. These kinescopes are available for rental. Any one or all of the kinescopes may also be purchased in black and white or color.

SUBJECT AREA(S)

The subject area is probability and combinatoric problems involving multistage experiments and the Monte Carlo simulation method.

INTENDED USERS AND BENEFICIARIES

Students of all ability levels in grades 7-12 are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

The major purposes of this short course in probability is: (1) To introduce the student to probabilistic thinking in a problem-solving mode, (2) to give the student some experience in an important branch of modern applied mathematics, (3) to provide a solid concrete background for a later theoretical study of probability theory, and (4) to provide something totally different from the usual secondary school mathematics program which can be used on a supplementary basis for a short period of time to arouse the students' interest and curiosity.

PATTERNS OF USE

This is a supplementary unit of instruction in mathematics which can be taught any time from the 7th to 12th grades, depending on the interest and numerical ability of the class. The kinescopes of five of the lessons can be shown to the class at the option of the teacher. If shown, the teacher can use the film as an instructional lesson itself by stopping it from time to time to have students answer the questions asked of the film class, or as a review lesson (i.e., showing the film after having first taught the lesson). In either case, by viewing the films the students will have the opportunity to observe one of the true master teachers of mathematics in the world, Professor Arthur Engel of West Germany.

ASSESSMENT PROVISIONS

A test for this course is available. The teacher should also use the exercises and problem sets worked on by the students for assessment purposes.

TIME REQUIREMENTS

With average and above-average students, this course should be completed within 15 class periods, each lasting 50-60 minutes. For slower students, it would be preferable to delay the teaching of this course until senior high school. For such students an additional five class periods would be beneficial.

IMPLEMENTATION PROCEDURES

Once a teacher or school district has made the decision to use this course, the only major procedural question is at which grade level to teach it. The course was developed with a very bright group of 10 students during the summer between their 7th and 8th year in school. Since that time the course has been taught successfully to well-motivated and verbally capable junior high school students, as well as to average and poorly achieving students at various high school grade levels.

The only other decision to be made is whether to teach the course with or without the kinescopes. These five films are completely optional; all problems solved in the films are completely solved in the student's text.

Summary Cost Information

The cost for this course is $5 per student and $0.65 per teacher. Each of the five kinescopes (45 minutes running time for each) is available for rental ($10 per film per week plus postage) or purchase ($155 per film, black-and-white—$300 per film, color).

Personnel Required for Product Adoption and Implementation

Regular secondary school mathematics teachers can teach this course with no additional training.

ASSURANCES AND CLAIMS

Because of the nature of this product, the issue of potential harmfulness has not been explicitly investigated. No reports of harmful results have been received from previous users of this product.

All of the instructional material is carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. All shortcomings of this type are eliminated upon discovery.

The product is intended as a supplementary unit of instruction, to be taught any time from the 7th to the 12th grade at the discretion of the teacher and requiring only about 3 weeks of instruction. It has not been widely tested. Two 7th- and two 11th-grade classes of above-average ability have successfully completed the course with untrained teachers and without assistance from CSMP. In addition, CSMP has completed some internal trials of this course. Data from tests administered to students upon completion of the course revealed that students were generally successful with definitional and straightforward applications of basic probabilistic concepts of dependent and independent events, permutations and combinations, and the use of tree diagrams. It should be noted that this information is based on very limited evidence, and this evidence also indicates that a longer period of instruction may be necessary before students, on their own, can successfully solve many of the more complex problems occurring in the text. Two reports on these trials are available:

(1) Test Data from Pilot Trial of "A Short Course In Probability," Martin Herbert, CEMREL Evaluation (mimeograph).

(2) Test Data from Second Pilot Trial of "A Short Course In Probability," Martin Herbert, CEMREL Evaluation (mimeograph).

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student text	1 per student	5.00	Consumable yearly	
Answer key for student text	1 per teacher	.65	Reusable	

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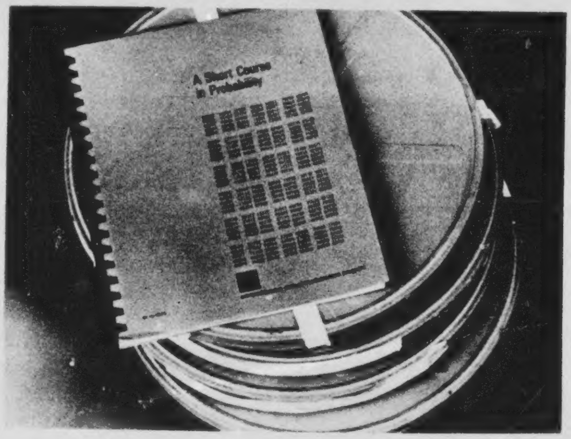

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 006

ELEMENTS OF MATHEMATICS (EM) PROGRAM (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)

*A program to bring modern mathematics to highly verbal,
well-motivated students in grades 7-12*

The *Elements of Mathematics* (EM) is a 7th- through 12th-grade program designed to bring good, modern mathematics to highly verbal, well-motivated students who are in the upper 10-15 percent of the school population. The program consists of a series of 16 textbooks, supplementary materials (such as films that deal with some of the content of a book 0 chapter on probability), and various support materials (such as quizzes and answer keys).

The materials are intended to be presented in a variety of ways. When studying book 0, the class is led by a teacher; each student studies individually in books 1-3; and in books 4-12, a seminar or problem-session approach is often most effective. The roles of the teacher and students vary accordingly. In book 0, the teacher directs the students' work; the relationship is close to the classical one between teacher and pupil, although there is heavy emphasis on experimentation on the part of the students. In books 1-3, the teacher becomes a resource person who answers questions when difficulties are experienced in the individual study of the materials. In books 4-12, the teacher is a discussion group leader who orchestrates the students' exposition of solutions to problems posed in the text. The student studies individually and yet prepares solutions to problems for presentation to the rest of the group.

SUBJECT AREA(S)

The *Elements of Mathematics Program* deals with mathematics topics normally covered in junior high school to topics usually not encountered before the advanced undergraduate level. There is a careful development of high school algebra, the theory of relations and functions, the standard number systems, elementary number theory, the calculus of one variable, affine and projective geometry, linear algebra, group and ring theory, finite probability theory, and measure theory, as well as an introduction to computer science.

INTENDED USERS AND BENEFICIARIES

Intended users are highly motivated students with high verbal ability in grades 7-12, approximately the top 10-15 percent of the school population.

Although the program, as a whole, was designed as complete for the junior high school-senior high school-age range, book 0 of the program has been used strictly for junior high school. In this case, it was found that the selection of students need not be so demanding.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To familiarize the student with some of the basic ideas, techniques, language, and notations of mathematics; (2) to help the student develop the ability to read and to write mathematical arguments; (3) to familiarize the student with the axiomatic method; (4) to help the student develop an appreciation of what this method does and does not provide; (5) to familiarize the student with the process of abstraction and the role this plays in the development of a mathematical theory; and (6) to provide experience with nontrivial, relevant applications of mathematics—in particular, to familiarize the student with the notion of model building and to provide opportunities of developing mathematical models of "real" situations.

PATTERNS OF USE

The EM program begins at the 7th grade; and for the first 2 or 3 years of the program, students study books 0 and A simultaneously with books 1-3. Thereafter, students study such books as 4, 5, and 6. All students who study the EM program for 6 years should finish book 6, but many of the abler students will be able to finish several of books 7-12. While books 1-6 have to be studied in linear order, books 7-12 offer several alternative sequencings and programs. The only interdependency that should be respected is that books 7 and 11 are prerequisites for book 12. Books B and C are supplementary books that can be dipped into as the student progresses through the series.

Books 0-3 can be used as a junior high school EM program if continuation at the high school level is impractical or cannot be arranged. Book 0, chapters 1-9, could comprise a 7th-grade or 7th-8th-grade honors program for the upper 25 percent of the population.

ASSESSMENT PROVISIONS

Quizzes are available which may be used to gage the student's level of understanding at various stages in each book. It is also recommended that daily homework exercises and problem sets be collected regularly and used as part of the general overall assessment of EM students.

TIME REQUIREMENTS

In order to complete the full program (books 0-12), the student will need to spend one period (50-60 minutes) per day on the EM program throughout junior high school (grades 7-9) and two periods per day throughout senior high school (grades 10-12). The alternative uses described above require 50-60 minutes per day in order to complete the corresponding amount of material.

IMPLEMENTATION PROCEDURES

The students should be carefully selected. It is suggested that this selection be carried out on the basis of standardized tests, particularly of reading ability, and a strong teacher recommendation, although it is left up to the individual school what relative weights are given to the data that are gathered in this way.

The teacher should have a strong mathematics background. In order for the teacher to be able to handle the full range of the program, this background should probably include a master's degree in mathematics. The teacher should attend a workshop in the summer prior to first teaching the 7th-grade program, and workshop attendance during each of the succeeding summers will insure continuation through the end of the 9th grade (approximately the end of book 3). Alternatively, this initial training through the 9th-grade program may be obtained through an academic-year program. Training for teaching beyond the 9th-grade level (books 4-12) is handled on an individual basis by CEMREL, Inc.

There should be a commitment on the part of the school system to a program of this nature for gifted students. This commitment should be evidenced in: (1) A willingness to allow the students involved to stay together as a group and to provide opportunity in the later grades for the students desiring to complete the entire program to spend twice the usual amount of time on mathematics with a corresponding increase in credits; (2) a willingness to keep class size to manageable levels (i.e., a maximum of 30 students in grades 7-8, 25 students in grades 9-10, and 20 students in grades 11-12); and (3) a willingness to provide some release time for upper level EM teachers to prepare properly for this very demanding type of teaching.

Every effort should be made at the outset to guarantee a smooth continuation of the EM program as students move from junior to senior high school, especially when a change of building is involved.

Summary Cost Information

The average cost per student has been $6 per year when the students kept the books as their own (as the developer hopes they can). Prices are subject to change.

ASSURANCES AND CLAIMS

No reports of harmfulness regarding the use of this program have been received from previous users. While the complete program has not been available long enough for students to have completed the series, students who have been through portions of the program or who have used prototype materials have encountered no difficulties in transferring back to regular programs. Many who completed extensive amounts of the prototype materials have received advance college credit in mathematics, and some have gone directly to graduate-level courses. Others who have been in the program from 7th through 10th grades have been able to go directly to college-level courses. This information has not been systematically collected, however, and no exact figures are available.

All of the instructional material is carefully scrutinized to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. All shortcomings of this type are eliminated upon discovery.

The EM series has been carefully developed. The broad structure of the program was developed in many meetings of Comprehensive School Mathematics Program (CSMP) staff associates at which various viewpoints of mathematics were discussed. More detailed structuring was the responsibility of the writing teams, which include the program director, staff associates, and writing staff.

The initial organization, the exposition, and the exercises in any one book were usually the work of one to three writers. The initial manuscript was read by members of the writing group who commented on it in detail and provided additional problems. The manuscript was revised as a result of these comments. The first trial of the material was conducted with a group of students from the local (Carbondale, Illinois) secondary school under the guidance of an experienced teacher who was generally a member of the writing team.

As a result of the initial trial, the manuscript was further revised and put into book form for a second trial with local secondary students. This trial resulted in further revisions, particularly of exercise and illustrative materials, resulting in a book suitable for pilot testing. Local students then continued to use the books, and pilot classes at distant sites began using materials in "hands-off" trials. The senior author and program director were responsible for consistency of language and notation used in the series, for articulation between the books, and for decisions regarding extent and types of revision. A general editor supervised the book production.

Where the guidelines recommended in "Implementation Procedures" of this document have been followed, the program has been successfully used as intended. Portions of the intuitive background series, book 0, have also been successfully used in Baltimore County, Maryland, by junior high school students. In that feasibility study, 5 CSMP 7th-grade classes of above-average ability (approximately the upper 25 percent) were compared with a total of 10 classes of similar ability studying 3 other modern mathematics textbooks. CSMP students scored higher than those of the other curriculums (at or near the .05 level of significance) on a series of nine tests from the National Longitudinal Study of Mathematics Achievement battery and had much higher scores on a series of six tests of EM content.

Since no students have had the chance to complete the entire EM program, no empirical data-based claims can yet be made about effectiveness of the total 7-12 program in promoting student learning. Preliminary evidence regarding student achievement has been based on relatively small numbers of classes studying the first few books in the series. This preliminary evidence indicates that EM students do about as well as non-EM students of the same ability on tests of traditional skills and concepts and do far better on tests specific to the content of EM.

RD 020 006

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete set of books for full program, grades 7-12	1 set per student	43.25	Incorporates 1 student's entire secondary school (7-12) mathematics text requirements	
Complete set of answer keys, grades 7-12	1 set per group of EM teachers (all teachers for 1 class from grades 7-12)	50.25	Reusable	
Quizzes for all books, grades 7-12	1 copy of each quiz per set of EM teachers	7.50	Reusable	
Complete set of books 0, 1, 2, 3 for junior high school program	1 set per student	16.80	Incorporates 1 student's entire junior high school (7-9) mathematics text requirements	
Complete set of answer keys for junior high program	1 set per group of EM teachers (all teachers for 1 class from grades 7-9)	24.25	Reusable	
Quizzes for junior high books	1 copy of each quiz per group of EM teachers	5.00	Reusable	

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AVAILABILITY

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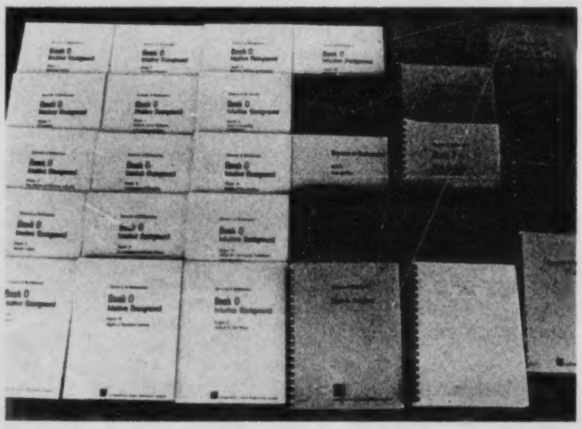


INFORMATION CURRENT AS OF MARCH 1975 ■

MATHEMATICS ACTIVITY PACKAGE I (MAP I) (MAY BE USED WITH MAPS II AND III OF THE EXPLORING NUMBER CONCEPTS PROGRAM)

A sequential mathematics curriculum for 5- and 6-year-old English-speaking children from low-income communities

This is an individualized program of teacher-directed instruction that is designed to teach basic mathematical concepts and skills in a sequential curriculum. The product is comprised of 12 units and 60 sequential activities implemented by a system of diagnostic testing and subsequent grouping. This mathematics curriculum provides for individual continuous progress with numerous options that coincide with children's differing interests and learning styles. The product operates according to each child's individual learning capacity. It simultaneously addresses two significant learner characteristics not met in other mathematics programs: The child's need to have many planned experiences with concrete materials, or manipulatives previous to abstract mathematics and the child's need to work with instructional materials that do not require reading ability.

Through diagnostic tests, children are placed in the program at their own developmental levels rather than by chronological age. This allows the children to begin where their needs are and monitors their progress at their own rate of speed. Emphasis is placed on having small groups composed of children at the same level of development. These children are taught in a special area of the classroom called the discovery corner. The discovery corner provides the following situations: the teacher interacts individually with each student during individualized testing, the teacher directs small-group learning activities, activites are reinforced and expanded, and opportunity is provided for unstructured experimentation and discovery by the children.

In the discovery corner, the teacher has the materials for each group. The instruction takes the children through three basic steps: (1) Giving the children a review and knowledge background through demonstration and explanation, (2) asking questions and giving guidance while providing many experiences with manipulatives for each child to experiment and apply the knowledge each has received, and (3) presenting a situation for children to demonstrate whether they have achieved the objective. The teacher records the results for each child and prescribes which activity the child will need next, either a new activity or test, or one of the expansion activities, which teach the same objective using another approach. The expansion activities present information on either a lower level or more advanced level, depending on the needs of the child. All tests are administered individually by the teacher. Thus, the role of the teacher in the MAP I product not only includes direct teaching and tutoring but also monitoring, managing (grouping and regrouping), and prescribing on a daily basis as determined by the system of diagnostic testing.

The child takes the role of the learner, experimenter, and discoverer. The child brings to school mathematics skills and concepts at a certain developmental level and from that point on is taught how to apply that knowledge to the acquired skills and concepts. Throughout *Mathematics Activity Package I* (*MAP I*), the children acquire basic mathematics concepts and understandings by manipulating concrete objects and by verbal interaction with consistent exposure to the language of mathematics. This provides a background for later comprehension of abstract mathematics.

This package incorporates a variety of instructional materials that accommodate individual interests and learning styles such as manipulatives, filmstrips, diagrams, pictures, and worksheets. Manipulatives not supplied by the product are ordinary objects which can easily be gathered in a minimum amount of time, such as pencils, crayons, spoons, facial tissues, and paper cups. Included in the product is a self-contained staff orientation package which provides all the necessary brochures, manuals, filmstrips, and cassette tapes. These training materials provide for teacher refresher courses and for training for new teachers, teacher aides, and class helpers.

RD 020 007

SUBJECT AREA(S)

This product content consists of a sequence of mathematics concepts which fall under three major topic headings: (1) Ordering, (2) sets, and (3) measurement. The resulting units of activities are designed to teach these concepts by involving the children in teacher-directed, enjoyable learning experiences.

Achievement of the carefully sequenced topic 1 activities results in the higher skills of ordering objects by color, size, and shape and gives the child a concrete basis for counting. The topic 2 sequences on sets extend the child's knowledge and application of properties; sets and subsets are identified, and their members are counted, using numbers and numerals 0 to 5. Topic 3 includes activities on measurement. The child compares and measures length, is introduced to quantity, and begins to use prediction in measurement.

INTENDED USERS AND BENEFICIARIES

The product is especially designed and tested for 5- and 6-year-old English-speakers from low-income communities where typical mathematics programs fail. Evidence is available that the product will be effective with children of differing ethnicity, sex, and income levels, in various geographical regions, if they understand English. This product was designed to be used by the regular classroom teachers, but it has also been utilized by special education and educational resource centers.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to maximize a child's learning development in mathematics skills by: (1) Meeting individual needs through a continuous progress curriculum, (2) enabling the child to acquire important basic mathematics concepts and skills before learning to read, (3) providing learning experiences that are designed to be enjoyable, (4) increasing the child's active vocabulary and communication skills, and (5) improving the child's self-concept by successful participation in challenging activities that are within the range of achievement.

PATTERNS OF USE

Mathematics Activity Package I is an individualized, continuous progress, mathematics curriculum comprised of sequential units of teacher-directed, related activities for small groups. It is a complete mathematics system; however, parts may be utilized as complementary options to existing mathematics curriculums. It can be used in a self-contained classroom situation, in open or traditional classrooms, and in graded or nongraded organizations. Because many of the product's concepts and skills fall under categories that are found in most kindergarten curriculums, it may be adapted to integrate parts of the product into a curriculum that is weak or does not have a mathematics area, or to adapt it to a curriculum that is weak in basic concepts and skills areas, such as auditory, visual, fine motor, ideas and concepts, and thinking and reasoning skills.

ASSESSMENT PROVISIONS

The product incorporates a diagnostic system using four types of individually administered tests to determine and confirm placement (both initial and continuous) and to check unit and topic mastery. The tests identify units of activities in which children need additional tutoring or other special attention. The tests are adequate to monitor the entire program, although few children will require all of them. The four types of tests include a topic inventory test, unit diagnostic instruments, unit tests, and a Topic Mastery Test. The Topic Inventory Test (total of three) is administered individually to each child to determine the child's tentative initial placement within a topic. The unit diagnostic instrument (total of 12) is administered before each unit when indicated by the topic inventory test to evaluate the accuracy of the topic inventory initial placement and to establish initial groupings. The unit test (total of 12) is administered on completion of a unit as a final evaluation of the child's achievement of unit objectives and serves as a basis for regrouping. The topic mastery test (total of three) is administered on completion of a topic to evaluate mastery of an entire topic.

The product also provides a system of recordkeeping which is vital to its effectiveness. The three elements of testing, grouping, and recordkeeping overlap and interrelate to comprise the MAP I diagnostic system.

TIME REQUIREMENTS

The teacher should allow an average of 20 minutes per activity. Since this is an individualized program using small-group sessions, the teacher should take into consideration all the characteristics of each group that might affect the length of an activity, such as the attention span of the children. Some of the activities will require longer or shorter time segments, depending upon the level of difficulty.

IMPLEMENTATION PROCEDURES

All parts of the MAP I product are self-contained and do not need any special equipment or services. The product does emphasize the need for a special mathematics area in the classroom to be used as a "Discovery Corner" by a label or sign. The essential furnishings for this special area are a chalkboard or bulletin board, a rug, and a round or curved table with chairs to accommodate at least eight children and a teacher. Other furniture items needed for this area are bookcases or small cabinets that would not only provide storage space for materials but also work as room dividers to allow for a degree of privacy.

Personnel Required for Product Adoption and Implementation

The product developer recommends that a school system installing this program designate an onsite trainer to conduct a training session for all personnel involved, such as administrators, supervisors, teachers, and aides. All materials needed to conduct a 3-hour training session are provided for the trainer in the staff orientation package.

ASSURANCES AND CLAIMS

The field test evaluation addressed the following concerns: (1) The achievement of the project pupil as compared to a similar target population, (2) the level of mastery on curriculum concepts as measured by criterion-referenced tests, (3) the extent to which project pupils demonstrate readiness for grade-1 mathematics instruction, (4) the extent to which positive self-concept is expressed, and (5) user perceptions of curriculum effectiveness and classroom management. Assessment instruments included *Test of Basic Experience Mathematics*, level K; *Self-Concept and Motivation Inventory*, kindergarten version; *Exploring Number Concepts MAP I Topic Mastery Tests*; and a user questionnaire.

During the development of the program, extensive formative feedback was collected from the children through the use of mastery tests and from the teachers through teacher checklists. Observations by the program staff were conducted on a regular basis. Another source of product revision data was based on oral conferences with the teachers. Formative pupil mastery data were analyzed for each lesson, using sex and ethnicity as analysis groups. This provided the program staff information in order to explore possible biases if they occurred in the lessons. The program staff, which was multiethnic, reviewed the materials for all possible biases as well as soliciting opinions from the teachers as they were using the materials. Where biases were identified, attempts have been made to correct the situation.

Results concerning the replicability and transportability of the materials are inconclusive at this time. However, the product is being used in classrooms at field test sites with little or no program intervention. As monitoring of the testing program has been ongoing, there is reason to believe the program is being implemented as intended.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
MAP I package including instructional manuals, a teacher's resource manual, criterion test, recordkeeping materials, filmstrips, cassette tapes, manipulatives, picture cards, paper cutouts, pads of worksheets	1	40.00 (field test edition)	Reusable	
Staff orientation package including filmstrips, audiotapes, materials for role playing, teacher's resource manual, and administrator's manual	1	Not determined	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Helen Williamson, Program Coordinator

AVAILABILITY

The product is currently under a developmental copyright.
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 008

MATHEMATICS ACTIVITY PACKAGE II (MAP II) (MAY BE USED WITH MAPS I AND III OF THE EXPLORING NUMBERS CONCEPTS PROGRAM

A cassette-directed package for teaching basic mathematics skills to 1st-graders from low-income communities

Mathematics Activity Package II (MAP II) is a continuous progress mathematics curriculum designed to teach basic mathematics skills to a 1st-grade learner. The product comprises a sequential curriculum of 60 activities. Diagnostic testing is utilized throughout the product to place children at their developmental levels and to assure continuous progress at their own rates.

The basic MAP II curriculum is cassette directed; essentially this means that a child or a small group works independently in its own booklets while listening to recorded instructions. This approach allows a greater degree of individualization and requires a child to work more independently than in teacher-directed, small-group activity sequences. MAP II is designed to move the child toward more abstract mathematics while continuing to provide meaningful experience involving the use of various concrete objects. Another characteristic of this product is that it does not require reading ability. Therefore, children may progress at their own rates without any outside pressures to add extra burdens upon them, such as: Having to read instructions, having to work through activities that do not relate to their environment or experiential background, or having to be left behind by the others or wait for the others to understand what they have already grasped.

MAP II also includes mathematics games for small groups of children. These games may be used to introduce or reinforce the concepts taught by the cassette-directed basic program and allow children to apply their skills and knowledge in an enjoyable way. Songs, both original compositions and traditional melodies, are also included as enjoyable reinforcement experiences. For added interest and motivation, the tapes and booklets follow "make-believe" themes featuring several fantasy characters.

The package includes a student orientation unit which trains the child to operate the equipment and teaches the skills necessary for following recorded directions. There is a workable system for keeping records on each child's progress. A resource bibliography lists mathematics-related children's literature and professional publications for the teacher, in addition to an annotated list of commercial games and manipulatives.

MAP II also includes a self-contained staff orientation package which includes all the materials needed for conducting a 3-hour teacher orientation session. This training package provides refresher courses for teachers and for training new teachers, teacher aides, and class helpers.

None of the typical mathematics programs that were used in comparison studies have really addressed the unique learner characteristics of children with language difficulties in the developmental levels usually associated with 5- and 6-year-olds. This is especially true for that child from an environment different from the typical middle-class child. The two major learner characteristics not addressed by other programs are the child's need to have planned experiences with concrete manipulations and the child's need to be able to work with instructional materials that do not require reading. The product's reliance on a multimedia approach meets a need for children who cannot read. Prediagnostic testing places the child in the program at a developmental level rather than a chronological-age level.

The teacher as classroom or mathematics center manager provides a working environment with all the necessary materials organized for continuous use. Before assigning any tests or activities, the teacher should know exactly what the child is expected to do in the activity and examine the answer key in order to score the booklet quickly and accurately. These preliminary steps are especially important because of the teacher monitoring inherent in the cassette-booklet format. As monitor, the teacher monitors progress of each child through periodic skill checks and tests and records and prescribes on a daily basis.

Tutoring and managing may be done by a teaching assistant or by a peer tutor when the situation seems appropriate.

The child is stationed at an individual unit or at group listening units. The learner independently works with manipulatives and marks a booklet according to instructions recorded on tape. The child is responsible for having the materials needed for working through a booklet and is responsible for getting the teacher to check periodically what has been accomplished. All instructions are provided to help the child carry out the responsibilities.

SUBJECT AREA(S)

MAP II consists of 60 sequential cassette-directed mathematics activities which fall under 3 major topic headings: (1) Numbers and numerals, (2) addition/subtraction, and (3) measurement. The actual content sequence is preceded by the student orientation unit, which includes "Learning to Listen" activities designed to teach the children to use the equipment and "Getting Started" activities which teach the children to respond to the directions they hear on the tapes.

INTENDED USERS AND BENEFICIARIES

MAP II is especially designed for English-speaking 5- and 6-year-olds from low-economic communities where typical mathematics programs fail. Research has also indicated productive use at 2d-grade levels and slightly beyond. It is also believed to be effective with children of all races, ethnicity, sex, and income levels in various geographical regions. It is intended for children who need a good foundation in basic mathematics skills and concepts; MAP II adequately prepares children who will go into a traditional 2d- or 3d-grade mathematics program.

The primary users of this product are the teachers and instructional aides who work with English-speaking, multiethnic, heterogeneous 1st-grade children from low-income communities. Other intended users are teachers in departmentalized grade levels, curriculum specialists, college or university professors who are working with individualized instruction in their educational courses, and school administrators.

GOAL(S) OR PURPOSE(S)

The basic goals of this product are: (1) To maximize the child's capacity to develop mathematics skill through a visual-aural mode not common to the traditional textbook approach, (2) to maintain individual continuous progress with numerous options that coincide with children's differing interests and learning styles, and (3) to allow a child to work with instructional materials without having to read.

PATTERNS OF USE

Each of the three topics and the units within them consist of a series of cassette tapes and student booklets which comprise the basic curriculum and the pretests and posttests for each unit. The children must first have mastered all the student orientation unit objectives and become totally familiar with MAP II cassette and booklet format before they move through the appropriate topics and units. After initial individual inventory testing, the teacher will know which tape and booklet to assign to each child.

The booklets are designed to include several pages which teach a specific concept or skill, followed by an evaluation page or skill check. Supplementary pages and a second skill check follow the basic activity. These pages reinforce or reteach the activity concept. They are assigned only to those children who do not meet the 80 percent criterion on the first skill check. Teachers using MAP II have found the centrally located mathematics room or learning center to be the most workable and convenient arrangement. In a learning center where equipment from all participating classrooms is "pooled," several groups can be working at group listening centers. In a self-contained classroom, at least one group can work together; perhaps more than one group can "take turns." After the children are thoroughly trained in the use of the equipment and in following directions, the group listening center arrangment can operate very effectively.

ASSESSMENT PROVISIONS

The diagnostic system of the *Exploring Number Concepts MAP II* curriculum is a vital part of the material. The tests are adequate to monitor the entire program, although few children will require all of them. The tests determine and confirm initial placement and check unit and topic mastery. They identify units of activities which may be bypassed by individual children and also identify concepts and skills on which children need tutoring or other special attention.

TIME REQUIREMENTS

The product estimates 30-minute time allotments for each activity or for 1 day of a 2- or more-day activity. This amount of time does not allow for short tutoring sessions if the teacher sees that a child is having difficulty. In relation to time, the teacher should also take into consideration that a child might have to wait for the teacher's assistance if quite a few other learners need assistance at the same time.

IMPLEMENTATION PROCEDURES

MAP II was initially designed to be used in a centralized learner or mathematics center within a school. The center should be the size of a regular classroom in order to accommodate an entire classroom of children at one time. Therefore, all the teachers who are participating in this program can "pool" their playback units and materials, and in this way the teachers can leave the equipment and materials out on shelves if the security in their school is adequate to allow this.

MAP II with 25 children requires a minimum of five individual playback units with earphones. Whatever manufacturer the school selects, the units should be equipped with both "reverse" and "fast-forward" controls, in addition to "on," "off," and "volume." Under no circumstances should the children use fully equipped tape recorders which have the capacity to record and erase. Also, a minimum of one group listening center for eight children with earphones to be connected to an individual playback unit is required.

If MAP II is implemented in a self-contained classroom, a specific area for mathematics activities should be designated so that the children may be monitored as they use the tapes and playback units. If the teacher has access to only one or two playback units everyday, then the instructor may schedule mathematics periods throughout the day. The children in the mathematics area can work independently while the teacher is carrying on regular routines with the rest of the class.

Personnel Required for Product Adoption and Implementation

The product developer recommends that a school system installing this product designate an onsite trainer to conduct a training session for all personnel involved, such as administrators, supervisors, head teachers, teachers, and aides. All materials needed to conduct a 3-hour training session are provided for the trainer in the staff orientation package.

ASSURANCES AND CLAIMS

The exploring number concepts *Mathematics Activity Package II* underwent pilot testing during the 1973-74 school year, with a sample consisting of 167 project pupils and 90 comparison pupils. Extensive formative feedback was collected for revision purposes. These data included pupil performance data, teacher checklists, program classroom observations, and oral conferences with the teachers. A user satisfaction questionnaire was also administered to determine user perceptions of the program. Variables addressed in these assessment instruments were pupil mastery of concepts taught, pupil interest, classroom management, and quality of the lessons.

The *Test of Basic Experiences Mathematics*, Level I, was the norm-referenced instrument selected because of the similarity of its contents to the concepts taught in the curriculum. Both the project group and the comparison group made significant gains from pretesting to posttesting. Therefore, it can be concluded that exposure to the exploring number concepts MAP III concepts materials did not impede pupil performance in mathematics concepts.

The product staff reviewed the materials for possible biases as well as for soliciting opinions of teachers as they were using the materials. Whenever biases were identified, attempts have been made to correct the situation. Formative pupil performance data were analyzed for each lesson using sex and ethnicity as analysis groups. This provided the project staff additional information in order to explore possible biases if they occurred.

This product will not be in field test stage until after November 1975; therefore, no assurances of replicability or transportability can be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
MAP II package including test and activity cassette tapes, student booklets, filmstrips, worksheets, pictures, posters, mathematics games, song tape, student orientation unit, teaching guides, student folders		Not determined	Reusable	
Staff orientation package including filmstrip, audiotape, teacher's resource manual, administrator's manual, and materials needed for role-playing activity		Not determined	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Helen Williamson, Program Coordinator

AVAILABILITY

Prototypes for the field test edition will be completed by May 1975. Contact the distributor for information:
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 009

MATHEMATICS GAMES PACKAGE (MAY BE USED WITH EXPLORING NUMBERS CONCEPTS, MAPS II AND III)

Mathematical games to incorporate skills and concepts found in primary level mathematics programs

The *Mathematics Games Package* consists of 13 mathematics games; it contains all the materials to play each game and an instruction manual which includes the specific concepts and skills it relates to, number of players, procedures, rules, and, for some games, variations.

This package was designed as an instructional approach since many children find it easier to comprehend concepts and to demonstrate their knowledge in a game situation than in a traditional paper-and-pencil form. The product is designed to create a relaxed atmosphere and for informal learning styles while also encouraging sportsmanship, motor coordination, independent thinking, strategy, problem solving, and cooperation.

When a game is being introduced for the first time, the teacher assumes the role of instructor. Before a game is introduced, the teacher and aide (if one is available) role play the game and become thoroughly familiar with all aspects of it, the concepts and skills the game relates to, all the instructions, the game board, and the playing pieces. Then the teacher introduces and explains step-by-step the game to children who are "ready" for these concepts and skills. All games are taught in small-group sessions. After the children know how to play the game, the teacher or aide may teach a variation of the game.

After the children have been introduced properly to a game, they may play it without any teacher supervision.

SUBJECT AREA(S)

Each game incorporates and reinforces skills and concepts found in most typical mathematics programs on the primary level. Such skills and concepts include counting, seriation, numeration, constructing addition and subtraction number sentences, and skills relating to fractions, linear measurement, volume, weight, time, and metric measurement.

INTENDED USERS AND BENEFICIARIES

The *Mathematics Games Package* is designed for children in the primary grade levels who need a different instructional approach to achieve in skill areas which may be causing difficulty in a traditional mathematics program. Anyone interested in games as an instructional approach or in addressing informal learning styles will benefit by this games package.

GOAL(S) OR PURPOSE(S)

These games have been devised to provide activities for the children to engage in while learning various mathematics concepts. They are designed to emphasize individual achievement and skill and allow for cowinners. In each game there is an absolute standard of winning which will allow for more than one winner.

PATTERNS OF USE

This product is a self-contained package of game activities that may be used as an instructional approach to reinforce certain mathematics skills and concepts in an ongoing mathematics curriculum.

ASSESSMENT PROVISIONS

No assessment instruments are included with this product.

TIME REQUIREMENTS

The length of each game depends greatly upon the use of the game and the children playing it. An average of 15 minutes for actual playing time would usually be enough time for most of the games in this package.

IMPLEMENTATION PROCEDURES

The developer recommends that the game be taught in small groups by the teacher for the first time. An aide or child who knows the game thoroughly may also teach the game. The value of playing the game is lessened if the children have not received instructions on how to play it and if they have not been introduced to the skills and concepts the game reinforces.

ASSURANCES AND CLAIMS

The games package has been used by approximately 330 multiethnic pupils in 13 classrooms where the teachers were also multiethnic. Two data-gathering techniques were used—program observations in the classroom and teacher-evaluation checklists for each game. The data collected indicated that the children enjoyed using the games, and most teachers felt the children were better prepared for their mathematics lessons. No indications of bias were reported from either of the data-gathering techniques utilized. The games are packaged in an attractive box with instructions for use. The data collected showed no indications that the games caused any classroom management problems, but did indicate that they were easily stored and also easily assembled and prepared for storage. Therefore, assurances of replicability and transportability are evident.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Mathematics games package including all playing pieces, game boards, spin dials, and game manual	1 package	Not determined	Reusable	

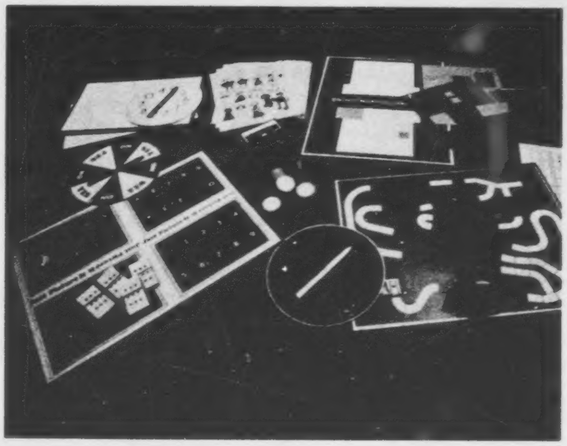
DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Helen Williamson, Program Coordinator

AVAILABILITY

Prototypes have been prepared for publishers and are only available on a limited basis. Requests for proposal are pending. The distributor is:
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 010

MATHEMATICS MUSIC PACKAGE

A multimedia package which reinforces primary mathematics instruction by associating mathematics concepts to songs

The *Mathematics Music Package* is designed as a self-contained musical activity package that will provide enrichment and reinforcement activities to primary level mathematics instruction. This package includes original compositions and traditional melodies recorded on two cassette tapes; it also has an instructional manual which includes general guidelines for classroom use of the songs and lyrics, and chord guides for all the songs. There are specific suggestions for children's active participation, such as hand motions or marching.

Songs were selected on the basis of their relevance to the concepts taught in most primary mathematics curriculums. The mathematics concepts or skills appropriate to each song are stated in the instructional manual.

The music materials were designed for maximum flexibility. Once children know the songs and motions, they can listen individually or in a small group without the teacher's supervision. Testing in classrooms indicates that music can be an excellent teaching tool. Many of the recommended songs associate mathematics concepts with situations that are familiar to children. This combination helps the students discover that mathematics is useful and interesting beyond the school environment. Mathematics facts which require memorization are often learned more easily when set to music. The enthusiasm most children show for singing and listening to music suggests that this package can be used to help promote a positive attitude toward mathematics.

SUBJECT AREA(S)

Mathematics Music Package incorporates many basic mathematics concepts and skills that relate to: Seriation; counting; reinforcement of the concept of properties such as shape, color, size, and number; adding, subtracting; multiplication; money; and measurement.

INTENDED USERS AND BENEFICIARIES

The music package is designed for all English-speaking, primary level children. It may also be used by classroom teachers, music teachers, aides, college or university professors, and educational administrators who wish to incorporate enrichment as well as reinforcement activities in teaching mathematical skills and concepts in their curriculums.

GOAL(S) OR PURPOSE(S)

The main purpose of this mathematics music package is to reinforce concepts and skills through enjoyable musical activities.

PATTERNS OF USE

The songs included in this package may be presented or taught in any order, although each song will be more effective if used in the order in which related mathematics skills are taught. Children who have already been taught the songs may then listen to them or become actively involved independently or in small-group settings without teacher intervention. The use of headsets connected to playback units provides enjoyment and reinforcement to an individual or a small group without disturbing the rest of the class.

TIME REQUIREMENTS

The product is designed to be flexible; therefore, there are no strict time limits related to the teaching of the songs.

IMPLEMENTATION PROCEDURES

Since the package is self-contained, there is no need for any specialized personnel or facilities. The teacher or aide will need a cassette playback unit in order to play the tapes included in this package; headsets and a good listening unit are needed if groups of children listen independently.

ASSURANCES AND CLAIMS

The *Mathematics Music Package* was used with multicultural pupils and teachers. No evidence of bias was mentioned when the program staff solicited teacher reactions. The music package contains music from a variety of cultures, and the responses from the children were extremely positive. The package contains two tapes and a songbook with words and music for both piano and guitar. Due to the nature of the product, no problems are expected with transportability or replicability.

RD 020 010

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Mathematics Music Package including cassette tape of recorded songs and instructional manual	1 package	To be determined	Reusable	

Note: Because this is a self-contained musical activity package, there will be need of only a classroom teacher to introduce the songs to the children. Musical talent and other qualifications are not necessary for success.

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
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Austin, Tex. 78701
Robert S. Randall, Program Director
Helen Wliamson, Program Coordinator

AVAILABILITY

Prototypes prepared for the publisher. Requests for proposals are pending. For information, contact:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 011

FUNCTIONS PUZZLES COMPUTER ASSISTED INSTRUCTION PROGRAM (FUNPUZ)

A program designed to give students in grades 2-12 experience in solving problems

The *Functions Puzzles Computer Assisted Instruction Program* (FUNPUZ) is designed to give students experience solving problems and to teach certain rules for manipulating text. The range of problem difficulty spans grades 2 through 12. Thousands of unique problems, encompassing approximately 400 different principles, are available. Problems are sequenced into 50 levels of difficulty, each representing several principles.

The FUNPUZ program provides the kind of responsive environment that is impossible without a computer, and represents a way in which computers can contribute to changing the content traditionally taught in the schools. The emphasis in the program is on problem solving and thinking skills such as stating the problem clearly, gathering data, using feedback, creating and testing hypotheses, and knowing when to stop working on a problem.

Every problem is based on a single functional rule that the student must infer from a set of examples. To help infer the rule, the student collects more data by inputting values which are transformed according to the rule and displayed. When a hypothesis about the rule has been developed, it can be tested by applying it to program-generated values. The program checks the result and provides feedback to the student. Cycles of self-testing and data collection continue until the student asks to change to a new puzzle. Between problems, the student is given feedback on performance and is asked to choose a new level for the next problem. Problems are provided until the student stops for the day.

The rules that form the basis for the problem include: Extracting, inserting or deleting characters from a string; reordering characters in a string; adding, subtracting, multiplying, or dividing numbers; counting characters; determining if a symbol does or does not satisfy a condition. These basic principles are combined to create more complex principles.

SUBJECT AREA(S)

The program teaches problem solving skills such as stating problems, gathering data, using feedback, and testing hypotheses. The content includes rules and problems from mathematics and English.

INTENDED USERS AND BENEFICIARIES

Students in grades 2 through 12 will find problems of appropriate difficulty in the program.

GOAL(S) OR PURPOSE(S)

The FUNPUZ program provides experiences which enable students (1) to use feedback more effectively, (2) to test hypotheses, (3) to gather data when needed, and (4) to enjoy solving problems.

PATTERNS OF USE

The program can be used without restriction. Students choose their own level of difficulty within the program and may enter at any time.

ASSESSMENT PROVISIONS

Placement within the program is unnecessary since students choose and adjust their own level of difficulty continuously.

Progress within the program is reported to teacher and student after each session. A progress graph is printed, separating the most current work from the earlier work.

TIME REQUIREMENTS

No restrictions are placed on the amount of time that students work. It is recommended that students spend about 5 hours on the program during the course of a school semester but considerably different patterns of use could be equally beneficial

IMPLEMENTATION PROCEDURES

To use the FUNPUZ program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype or teletype-compatible cathode ray tube (CRT) and is enhanced if run on a CRT, capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300.

Approximately 3 months of expert programing would be required to adapt the program to most other time-sharing systems.

Teacher orientation requires approximately 2 hours, and each student needs half an hour on the terminal to learn the necessary management skills for accessing the program and performance within the program. Students work individually on the program. Any school organization that allows students to work on different objectives at their own pace within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

In the 2 years that FUNPUZ was pilot tested in a single school, no report of harm to any student was received. The program contains no materials capable of showing racial, ethnic, or social bias.

The FUNPUZ program has never been used outside of the producer's direct control, so no assurance of replicability or transportability is possible at this time. At the field-test site, the program operates with minimal producer intervention, so that it is likely that the program will operate successfully at other sites.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
FUNPUZ computer program	1 per computer system	Cost of duplication	Reusable	

Note: Use of FUNPUZ requires a computer system as described under "Implementation Procedures." Teacher orientation is available from the developer.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Richard Allan Roman, Project Director

AVAILABILITY

The product will be available in the summer of 1975. Copyright is pending.

Contact:
Richard Allan Roman
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 012

MATH FUNCTIONS COMPUTER ASSISTED INSTRUCTION PROGRAM (MATH FUNCTIONS)

A program which teaches problem solving by an inductive method to students in grades 2-6

The *Math Functions Computer Assisted Instruction Program* is designed to teach those behaviors in elementary school mathematics which are based upon functional rules relating an input value to a single output value. Examples of the behaviors taught include: Translation of Roman numerals to Arabic numerals, writing standard numerals in expanded notation, adding fractions with common denominators, comparing the magnitude of different numbers, and finding the missing value in a number sentence. Approximately 100 objectives are available, and these cover one-fourth of the content of grades 2 to 6 in elementary school mathematics—those content areas related to functions. These objectives correspond to portions of the *Individually Prescribed Instruction in Mathematics Program* (IPI), but use of math functions is independent of IPI.

Math Functions teaches by an inductive method. In each step of the instruction for an objective, the student induces a functional rule from a set of examples. Additional examples can be asked for, and then the student demonstrates mastery of the rule by self-testing. Instruction for an objective proceeds through 2 to 12 steps before the objective is mastered. Differential performance at each step leads to adaptive branching between steps. Every objective includes both remedial steps and postmastery enrichment steps.

The program includes features designed to teach general problem-solving skills in addition to the specific mathematical skills. Problem-solving skills include: Gathering data, organizing data, formulating and testing hypotheses, using feedback, and knowing when to stop.

SUBJECT AREA(S)

Elementary mathematics and problem solving is the subject area.

Specific topics include addition of integers, comparison of fractions, multiplication of integers, place value, rounding off, number sentences, and reducing fractions. One hundred objectives are available for instruction.

INTENDED USERS AND BENEFICIARIES

The program is designed for use by elementary school students in grades 3 to 6.

GOAL(S) OR PURPOSE(S)

Math Functions provide experiences which enable the student: (1) To perform the instructed behaviors with 85 percent accuracy on a paper-and-pencil test, (2) to understand the concept of mathematical function in an informal manner, and (3) to improve general problem-solving skills.

PATTERNS OF USE

Objectives are independent of each other, but students must have mastery on prerequisite objectives before entering the program for any given objective. Students who work on many objectives benefit by the cumulative effect of their experience.

Students work individually at a computer terminal at a time determined by the teacher and/or the student.

ASSESSMENT PROVISIONS

The implementer must determine that entering students have prerequisite skills for each objective they attempt. Schools using IPI mathematics can use pretests available with that program, and math functions can be used as an alternative medium for instruction in certain objectives. In non-IPI settings, comparable pretests would be required.

After each working session on the machine, a summary of progress is printed for the implementer. The program determines when the student has met the mastery criterion for any objective. In IPI schools, the paper-and-pencil criterion-referenced posttest or the curriculum-embedded test can be used to assure that the program decision is correct.

TIME REQUIREMENTS

Objectives for mastery vary enormously in time. The shortest take 10 minutes, the longest take 120 minutes; and most are completed in 30 minutes. These times are comparable to paper-and-pencil instruction for the same objectives. Once students enter an objective, they should work 30 minutes each day until completing the work. The program allows longer or shorter sessions at the discretion of the student, who may stop work at any time. Since approximately one-fourth of the standard elementary mathematics curriculum is available on the program, students could work on math functions during one-fourth of their mathematics time for the year.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype or teletype-compatible cathode-ray tube (CRT), and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. Approximately 3 months of expert programing would be required to adapt the program to most other time-sharing systems.

Teacher orientation requires approximately 2 hours, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performance within the program. Students work individually on the program, so any school organization that allows for students to work at their own pace on different objectives within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

Assurances

During the 2 years of operation in a school setting, there were no observations of harm to students using the program. Students are treated uniformly, regardless of race or sex. The content of the program is mathematical and there are no sex, racial, age, socioeconomic, or religious biases.

The program has never been used outside of the producer's direct control, so no assurance of replicability or transportability is possible at this time. At the field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

Claims

Math Functions was tested and revised continuously for 2 years. Four major new versions were developed during that time. Testing consisted of approximately 50 students using the program between each major revision. Detailed analyses of student errors were the basis for revisions. The percentage of students who passed paper-and-pencil transfer tests after using the program steadily increased during the revision cycles, finally reaching 90 percent.

Throughout its development, *Math Functions* achieved success at teaching the objectives in the curriculum. The best indicator of success is that 88 percent of all students entering the program mastered the particular objectives they were taught.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Math Functions Computer Assisted Instruction Program	1 per computer system	Cost of duplication	Reusable	
Pretests and posttests (from IPI mathematics)		1.05 per package of 10 (pretests and posttests packaged separately)	Consumable yearly	New Century Education Corporation

Note: Use of *Math Functions* requires a computer system as described under "Implementation Procedures."

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Richard A. Roman, Project Director

AVAILABILITY

Math functions is available for duplication costs. Copyright is pending. For information, contact:

Learning Research and Development Center
University of Pittsburgh
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Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 013

NUMBER FACTS COMPUTER ASSISTED INSTRUCTION PROGRAM (NUMBER FACTS)

A program to teach and drill the elementary number combinations found in addition, subtraction, multiplication, and division tables

Number Facts Computer Assisted Instruction Program (Number Facts) is an interactive computer program designed to teach and provide practice in the elementary number combinations found in addition, subtraction, multiplication, and division tables. These are a vital prerequisite to the higher level arithmetic operations, and an ability to recall them quickly can facilitate acquisition of mathematical skills in general. The student works at a computer terminal according to sequence of steps incorporated in the program. The program begins by giving the student specific instruction in groups of problems with which the individual student has had particular difficulty. For example, a student who has missed addition problems with the number 6 will be given special instruction in these problems. As the student gets more proficient and makes fewer errors, the program shifts to a special item selection procedure based on a mathematical model of associative learning.

Number Facts is intended to be used as a supplement to classroom work. Whenever the teacher or student decides it is useful, the program can be accessed. The program runs for 10 minutes of instruction, or it can be terminated earlier if desired. Records are kept within the computer so an individual student can return to the program at any point or begin again whenever necessary. A special output program provides reports on the progress of each individual student after each session. The student or teacher can select from the program any type or mix of problems at any time.

Tests of the program indicate that it provides maximally effective instruction in one of the most important basic arithmetic skills, mastery of number facts. Its flexibility makes it adaptable to a variety of teaching styles, and it reduces greatly the tedium experienced by both teachers and students in the standard methods of fact instruction.

SUBJECT AREA(S)

Instruction is given in the basic single-digit arithmetic operations of addition, subtraction, multiplication, and division.

INTENDED USERS AND BENEFICIARIES

The instructional program is meant to be used by students in grades 1-5. Teachers benefit by a reduction in the normal test checking and management required for instruction in arithmetic operations.

GOAL(S) OR PURPOSE(S)

Number Facts provides drill and practice which enable the student to recall quickly and reliably the single-digit number facts of addition, subtraction, multiplication, and division.

It is intended that students will learn basic number combinations faster and more pleasantly than they presently do, and that there will be a reduction in the administrative workload of teachers. Number combinations are a vital prerequisite to further arithmetic and mathematics, and a failure to learn them well has been shown to be a major obstacle to progress in mathematics.

PATTERNS OF USE

Usage of this program is controlled by the student individually or in consultation with the teacher. At the beginning of each session, the program asks the student which operation (addition, subtraction, multiplication, or division) or combination of operations is desired. Based on the student's response and whichever stored records of past performance are available (if any) for that student on that operation, the computer generates an instructional sequence and practice problems. The student can request, or the teacher can prescribe, as many or as few sessions on the program as necessary.

ASSESSMENT PROVISIONS

No previous screening or evaluation of students is required. Students use the program when they and/or the teacher thinks it appropriate.

Complete historical files are kept in computer memory for each student session. An output program prints a summary of each session, giving the number of problems correct and incorrect, the average answer time, and the specific problems missed. This report can be used by the teacher or student to make decisions about further program use.

TIME REQUIREMENTS

The program terminates after 10 minutes, but the student can end a session earlier by typing "STOP." The number of sessions spent on the program is decided by the teacher and/or student. For individual students, it is recommended that use be discontinued when improvement in accuracy on the particular type of fact (e.g., addition, division) levels off, which may occur before 100 percent accuracy is achieved. Research indicates that, for some students, further practice after this point is unlikely to bring about perfect mastery.

IMPLEMENTATION PROCEDURES

The program requires a cathode-ray tube (CRT) computer terminal and access to a time-sharing computer system capable of running programs written in FORTRAN IV. Some alteration may be required to adapt the program to the local computer system. Teachers require about two 30-minute orientation sessions in order to understand the purpose and usage of the program.

ASSURANCES AND CLAIMS

Assurances

Number Facts has been used in the suburban elementary school affiliated with LRDC for 3 years. It has been used by 250 students for approximatley 8000 sessions. There have been no observations or reports of discomfort or dissatisfaction with the program. After 3 years, interest is still increasing.

The content of the program is mathematical and is not likely to perpetuate sexual, racial, religious, or ethnic stereotyping.

The program has never been used outside of the producer's direct control; therefore, no assurance of replicability or transportability is possible at this time. At the field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

Claims

Evaluations of *Number Facts* based on studies conducted during field testing at the suburban school where it operates, indicate that: (1) Students become faster and more accurate at number facts while using the program, (2) the specific instructional strategy used by the program reduces errors, and (3) the individualization procedures used in the program are consistent with individual differences in the population of students. Further evaluation indicates that use of the program in the school leads to better learning of number facts than alternative paper-and-pencil modes of instruction.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Set of 2 computer programs (for problem generating and record keeping)	1 set per computer system	Cost of duplication	Reusable	

Note: Use of *Number Facts* requires computer hardware and software as described under "Implementation Procedures." Orientation for use of the program is available from the developer.

DEVELOPER/AUTHOR:

**Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260**

Eric Jacobson, Project Director

AVAILABILITY

Copyright is pending. *Number Facts* is available for cost of duplication from:
**Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 014

WORD PROBLEMS COMPUTER ASSISTED INSTRUCTION PROGRAM (WORD PROBLEMS)

A program which teaches noncomputational skills involved in solving arithmetic word problems to grades 3-7

The *Word Problems Computer Assisted Instruction Program* teaches the noncomputational skills involved in solving arithmetic word problems. It teaches students how to translate verbally presented problems into mathematical terms and to set up algebraic equations that can be solved using known operations. The computer prints problems, does all the computations the student directs, judges whether answers the student proposes are correct, prints hints on request, and sequences problems by difficulty level.

Because students are directed to command the computer to calculate values, rather than to do their own calculations, the program can make use of numbers larger than students can conveniently handle. These larger numbers are important, since in more traditional word-problem instruction the numbers cue the arithmetic solution. In the *Word Problems*, program numbers are chosen so that one is always divisible by another. This effectively eliminates irrelevant cuing by the numbers and makes the student seek more appropriate rules for solution.

The program hints provide three different types of assistance: The first hint identifies the unknown quantity and asks the student to reread the problem, the second hint is an analogous problem stated in less complex syntax, but with the same meaning—the student is directed to compare the new wording with the original; and the third hint translates the problem to a number sentence that the student can solve directly.

The sequencing of the word problems is a major factor in the instructional efficacy of the program. Traditional instruction has placed a homogeneous group of addition word problems after an addition unit, and similarly placed other sets of problems so that each problem cued the correct solution procedure for the others. The *Word Problems* program sequences problems on the basis of the information processing demands on the solver, rather than on the basis of the required arithmetic process. Problems that require a similar quality and quantity of thought for understanding are grouped together into objectives. Twenty-four objectives include all the instructional problems. The 24 objectives are arranged in a complex branched hierarchy that forms the basis for sequencing through the objectives. The hierarchy is determined by increasing information processing demands.

SUBJECT AREA(S)

The subject area is computer-assisted instruction in elementary school mathematics, specifically the noncomputational skills of solving arithmetic problems.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for students in grades 3-7, the program might benefit older students who have difficulty with arithmetic word problems.

GOAL(S) OR PURPOSE(S)

Word Problems provides experiences which enable students: (1) To identify the arithmetic processes required to solve word problems, (2) to use the concept of variable in algebra, and (3) to develop general problem-solving skills.

PATTERNS OF USE

Objectives are hierarchical and cumulative. Students should begin with the first introductory problems and proceed through the objectives as the program determines mastery or nonmastery for them.

ASSESSMENT PROVISIONS

All students enter the program at the introduction and proceed by steps to their competence levels. Material that is already known is mastered quickly and serves to familiarize the students with skills needed for success in the program.

After each session, a summary report, showing the student's status on each of the 24 objectives and what progress was made during the session, is printed for the teacher and students.

TIME REQUIREMENTS

Data are not available to assess time requirements. Recommended usage would be one 20-minute session each week for a school year, although other patterns of use are possible.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype or teletype-compatible ray tube (CRT) and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. Approximately 3 months of expert programing would be required to adapt the program to most other time-sharing systems.

Teacher orientation requires approximately 2 hours, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performance within the program. Students work individually on the program, so any school organization that allows for students to work at their own pace on different objectives within the same classroom can support work on the program.

MATERIALS AND EQUIPMENT

Use of *Word Problems Computer Assisted Instruction Program* requires a computer system as described under "Implementation Procedures." Teacher orientation is available from the developer.

ASSURANCES AND CLAIMS

Assurances

In the field testing of the *Word Problems* program to date, no harmful effects of the program have been observed.

Care was taken to assure that the product does not perpetuate sexism, racism, or other biases related to religion, age, or socioeconomic stereotypes. Situations depicted in the problems presented are set up so that male and female names are inserted randomly for the actors in the problem. In adapting the program to local sites, it is possible to substitute any set of names, thus making the problems more suitable for the target population.

The program has never been used outside of the producer's direct control, so no assurance of replicability or transportability is possible at this time. At the field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

Claims

Careful product development is claimed for the word problems program. *Word Problems* has undergone three cycles of development and testing. The first cycle included laboratory work with a simulation of the final product with four students. The second cycle pilot tested a preliminary version of the program with five students. This led to the current version which is being tested with 28 students to determine the effectiveness of the teaching strategies.

Principles of information processing psychology were used to create teaching objectives, and instructional strategies include those found most effective in the literature. The program was designed according to the Process Individualization Curriculum (PIC) Model developed at the Learning Research and Development Center, which employs content, concept, and component analysis as a means of selecting the proper sequence and content of instruction.

RD 020 014

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Word Problems computer program	1 per computer system	Cost of duplication	Reusable	

Note: Use of *Word Problems* requires a computer system as described under "Implementation Procedures." Teacher orientation is available from the developer.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Richard Allan Roman, Project Director

AVAILABILITY

The *Word Problems Computer Assisted Instruction Program* will be available in summer 1975. Copyright is pending. For information, contact:

Richard Allan Roman
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 015

DEVELOPING MATHEMATICAL PROCESSES

A program for grades K-6 which provides an intuitive introduction to the major ideas of geometry and statistics

Developing Mathematical Processes (DMP) is a research-based, elementary mathematics program developed by the Analysis of Mathematics Instruction (AMI) Project at the Wisconsin Research and Development Center. It is the mathematics component of the center's program of Individually Guided Education (IGE). DMP provides a complete mathematics program for the elementary school, including not only the usual topics of arithmetic, but also an informal, intuitive introduction to major ideas of geometry and statistics. DMP is based upon the assumption that children learn best in an active environment where they can seek out answers to problems of personal interest. This active environment stems from the development of arithmetic through a measurement approach, with the children themselves generating and working with the numbers and their relationships.

In a measurement approach, children examine objects in their world and focus on some attribute (e.g., length, numerousness, weight, capacity, area, time). They use various processes (describing, classifying, comparing, ordering, equalizing, joining, separating, grouping, and partitioning) to explore relationships between objects. Once children are familiar with the attributes, they symbolically represent (measure) them. Likewise, they symbolically represent the relationships between objects with mathematical sentences. Then the children represent mathematical sentences with real objects to check their validity.

The entire DMP program has been built around specific learning objectives. Closely related objectives and the activities designed to promote their attainment have been clustered to form approximately 90 topics. Each topic will contain appropriate teacher's guides, student booklets, textbooks (for intermediate levels), testing materials, and kits of physical and printed materials. The topics have been grouped into units to organize materials and to facilitate the continuous progress design of IGE. The topics also have been grouped into levels that approximate 1 school year of study.

The primary materials include topics 1-40, the lower intermediate materials include topics 41-65, and the upper intermediate materials include topics 66-90.

Since the DMP approach to elementary mathematics may be new to many teachers, successful implementation of the program requires inservice training. In order for a school district to help teachers use DMP effectively, a coordinator who is well versed in the rationale and pedagogy of the program is needed to conduct the inservice program. A carefully developed plan has been designed to effect the implementation of DMP.

SUBJECT AREA(S)

DMP is a complete elementary mathematics program for grades K-6. The content of the program includes instruction in the arithmetic of rational numbers, an informal introduction to geometry, and some fundamentals of statistics. Arithmetic evolves from physical problem situations and advances to the use of relevant symbolization and mathematical sentences. Unnecessary technical vocabulary is avoided; children can communicate their ideas verbally because they develop an understanding of the language through direct experiences.

The geometry of DMP is an intuitive look at the sizes, shapes, and relationships of two- and three-dimensional objects. Elementary notions of statistics help the children organize and analyze the data they collect. Validating solutions to problems is treated as an important procedure throughout the program. The activities provide repeated opportunities for meaningful practice in problem solving, with emphasis on development of basic skills through understanding of processes.

INTENDED USERS AND BENEFICIARIES

Though DMP is designed for use in a multiunit elementary school (MUS-E), it can be used effectively by teachers with students of varying abilities in a variety of school settings. The DMP large-scale field test has included suburban, urban-core, and nonurban schools, with both public and private schools participating. The program has been used with children of differing socioeconomic backgrounds, with children in special education classes, and with children on an American Indian reservation. A special Spanish version of the student materials will be available from the commercial publisher for use in areas of the country where such a version is necessitated.

GOAL(S) OR PURPOSE(S)

The goals of DMP are: (1) To foster more careful attention to the learning progress and problems of the individual child; (2) to develop more favorable teacher and student attitudes toward mathematics, thereby generating a more wholesome school and class atmosphere; (3) to help children become inquiring, independent problem solvers; and (4) to enable children to acquire and demonstrate competency in the arithmetic of rational numbers, the geometry of physical time-space, and the fundamentals of statistics.

PATTERNS OF USE

The 90 DMP topics in the 7 levels of the program have been arranged in sequence to provide variety and to space the development of concepts. Students may progress through the topics in a variety of ways. The program provides a master sequence chart, with suggested guidelines, from which teachers select appropriate topics and activities for each child. DMP is sequenced around a hierarchically ordered set of objectives and includes a complete assessment and management scheme. Upon completion of all materials, the program will provide complete mathematics instruction for students in grades K-6.

ASSESSMENT PROVISIONS

The assessment procedures allow a teacher to measure children's progress by their performance on a given set of objectives. There are three categories of objectives: (1) Regular—an objective that most children are expected to master by the end of a topic, (2) preparatory—an objective that most children are not expected to master by the end of a topic, and (3) review—an objective that has a regular objective in a previous topic and is repeated for review work. Three levels of mastery are suggested to rate the progress a child makes on each regular objective: M—mastery, P—making progress toward mastery, and N—needs additional help before mastery can be attained.

DMP offers many forms of assessment and several ways to keep records. The assessment procedures are designed to provide placement information, for which placement inventories and pretests are provided; to assist in determining a rating for a child on a regular objective, for which observation schedules and topic inventories are supplied; and to check on a child's level of mastery of previously mastered objectives, for which a series of checkup tests are provided. With the exception of the placement inventories, which are used for initial placement, the procedures are used with specific topics.

Since children progress through DMP topic by topic and not year by year, it is important for teachers to maintain assessment records so that the most advantageous instructional decisions can be made for each child. DMP provides three kinds of pupil-performance records from which to choose: (1) Topic checklist—to record observations which the teacher makes about the children during the course of a topic; (2) individual progress sheet—to provide a cumulative record of each child's progress as the student progresses through several topics; and (3) group record card—to record, for an entire group of children, the level of mastery of the regular objectives.

TIME REQUIREMENTS

Though DMP is a continuous progress program, certain topics have been designated as being appropriate for each grade level: topics 1-14, kindergarten; topics 15-27, 1st; topics 28-40, 2d; topics 41-52, 3d; topics 53-65, 4th; and topics 66-90 (under development), 5th and 6th.

Each topic is designed to be completed in approximately 2-4 weeks, with mathematics class time varying from about 2 hours per week in kindergarten to about 5 hours per week in the upper grades.

IMPLEMENTATION PROCEDURES

The dissemination and utilization of DMP has been carefully and systematically planned so that the program will be widely and effectively used. A four-stage implementation model has been developed by the AMI project to implement DMP; the four stages in that model are awareness, installation, maintenance, and refinement.

The first stage, awareness, has two primary functions: To introduce leaders and decisionmakers in school systems to DMP and to provide indepth information to those leaders and decisionmakers so that they can determine whether to make a firm commitment to DMP.

The second stage, installation, is designed to provide the necessary assistance to those who adopt DMP to begin the program. Therefore, the primary functions of this stage are: To provide the teachers inservice necessary to acquaint them with DMP instructional and assessment materials, and the management of instruction and to provide information to principals or other school leaders to enable them to support the implementation of DMP. In addition to the training which a local coordinator receives at a 3-day conference, a manual is provided for use with inservice materials being developed for DMP.

The local coordinator is the key person in the third stage of implementation, maintenance. The main purpose of the maintenance program is to give teachers support and guidance while they adapt their teaching styles to DMP. Other purposes are to provide guidance to the principals and other school leaders as they support the DMP implementation program and to gather information to evaluate the effectiveness of the initial installation activities.

The final stage of the implementation is refinement. The developers of DMP realize that an educational innovation is likely to lose its effectiveness unless means are provided for its continual study and revision. To increase this capacity for self-renewal in DMP schools, appropriate staff training programs will be a part of the refinement stage of the DMP implementation.

ASSURANCES AND CLAIMS

Assurances

Information gathered from extensive pilot testing and subsequent field tests in 21 States indicates that the DMP materials can be used successfully by competent, qualified teachers and can be implemented successfully when the recommended implementation procedures are followed. Neither the developers nor the publishers have received reports or evidence of harm associated with the use of this program.

The developers of DMP have made a concentrated effort to insure that program materials do not display social bias, including ethnic and sexual stereotyping. Such shortcomings have been overcome through careful revision of the materials.

Claims

Upon completion of all curricular materials, DMP will provide a program of complete, comprehensive mathematics instruction for students in grades K-6. The program has been carefully developed, piloted, and field tested. From the results of both small- and large-scale field tests, it has been concluded that the basic instructional approach of DMP (i.e., teaching children elementary mathematics via an activity-oriented, measurement approach) is sound, viable, and productive. Students attain high levels of mastery of the program's objectives. Teachers almost unanimously have accepted the program because of the enthusiasm and success it generates in students.

The pilot testing and field testing of DMP materials have continued in 1974-75. The gathering of formative and summative data about DMP is an ongoing task of the AMI project.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Level K: Complete kit includes following components:	1 kit per 32 students*	215.00		
Physical materials kit A		91.00	Reusable	
Printed materials kit		54.00	Reusable	
Teacher materials kit		24.00	Reusable	
Student materials kit		51.00	Consumable yearly	
Level 1: Complete kit includes following components:	1 kit per 32 students	390.00		
Physical materials kit A		91.00	Reusable	
Physical materials kit B		130.00	Reusable	
Printed materials kit		54.00	Reusable	
Teacher materials kit		30.00	Reusable	
Student materials kit		90.00	Consumable yearly	
Level 2: Complete kit includes following components:	1 kit per 32 students*	425.00		
Physical materials kit A		91.00	Reusable	
Physical materials kit C		150.00	Reusable	
Printed materials kit		54.00	Reusable	
Teacher materials kit		30.00	Reusable	
Student materials kit		105.00	Consumable yearly	
Level 3: Complete kit includes following components:	1 kit per 32 students	500.00		
Physical materials kit		200.00	Reusable	
Printed materials kit		54.00	Reusable	
Teacher materials kit		30.00	Reusable	
Student materials kit		90.00	Consumable yearly	
Student guide kit		132.00	Reusable	
Level 4: Complete kit includes following components:	1 kit per 32 students	455.00		
Physical materials kit		156.00	Reusable	
Printed materials kit		54.00	Reusable	
Teacher materials kit		30.00	Reusable	
Student materials kit		90.00	Consumable yearly	
Student guide kit		132.00	Reusable	

*It is not always necessary to purchase a kit for each group of 32 students; alternate suggestions are provided for ways to share kits.
Note: The materials for DMP Levels 5 and 6 are still under development.

RD 020 015

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center for Cognitive Learning
University of Wisconsin-Madison
1025 West Johnson St.
Madison, Wis. 53706

Thomas A. Romberg, Principal Investigator
John G. Harvey, Principal Investigator
James M. Moser, Project Coordinator
Mary East Montgomery, School Coordinator

AVAILABILITY

The Primary Materials (topics 1-40) are now available in the commercial edition; Lower Intermediate Materials (topics 41-65) are available in the developmental version and will be available in the commercial version for the 1975-76 school year; Upper Intermediate Materials (topics 66-90) are available in pilot version only; the developmental version and commercial edition will be available for school years 1975-76 and 1976-77, respectively.

The materials in commercial or developmental form are currently available from the publisher/distributor:

School Department
Rand McNally & Company
Box 7600
Chicago, Ill. 60680

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 016

INDIVIDUALIZED MATHEMATICS

*A program for individualized adaptive instruction
including independent study for grades K-2*

Individualized Mathematics (IM) is a program for individualized adaptive instruction in mathematics for use in grades K-2. The curriculum consists of 33 instructional units which are sequenced in a hierarchical structure of relationships. Each unit involves an average of five instructional objectives, each of which is the basis of one specific lesson. The total program includes instructional materials for each objective, placement tests, unit pretests, unit posttests, and curriculum embedded tests (CET's). Other program components include presciption forms for each unit, a teacher's manual, a testing manual, and materials to be used in providing review and maintenance of basic operations command.

Instructional materials include both lesson booklets and manipulative materials. Manipulatives are concrete objects which children can physically handle, giving a spatial and tactile dimension to the basic concepts of mathematics. A major feature of the IM program is that it allows the pupil to use manipulative lesson materials largely on an independent-study basis. This is accomplished by providing a picture or "model" for each manipulative activity. The student first arranges the manipulative materials to duplicate the model and then practices this type of activity by using the same procedure with other sets of materials. Manipulative lessons introduce basic concepts and operations by illustrating or solving them through pupil manipulation of concrete objects. This represents an effort to provide the pupil with the kinds of concrete experiences suggested by the work of Piaget, Bruner, Dienes, and others, and to do this within the context of a system that is maximally adaptive to the needs and abilities of the individual learner.

SUBJECT AREA(S)

The program teaches primary-grade arithmetic starting with the comparison of sets, an introduction to counting and the counting numbers, and proceeding through the development of the basic operations of addition, subtraction, multiplication, and division. The program also introduces the student to fractions and to such areas as time, money, and applications of basic operations in story problems.

INTENDED USERS AND BENEFICIARIES

This program could be used in grades K-2 in any school attempting to provide individualized adaptive instruction in arithmetic, either where instruction is prescribed by the teacher or where the students schedule their own learning activities. It could also be used in an open-classroom situation under a plan whereby pupils could use some of the diagnostic tests and the self-instructional materials to plan and carry out their study of basic arithmetic skills at the time when the acquisition of such skills seems essential.

GOAL(S) OR PURPOSE(S)

General goals of the program, which have been defined in terms of abilities and attitudes that the pupil is expected to acquire, are: (1) To master a mathematics content which emphasizes basic structure, properties, and relations, in addition to competency in performing arithmetic operations, and to be able to display this mastery at a level of understanding which provides a sound basis for "moving on" in mathematics; (2) to be able to employ "study skills" abilities that permit the student to learn from a variety of types of materials and experiences and to display abilities in self-direction and self-evaluation which permit effective independent study; and (3) to display a positive attitude toward learning and toward the study of mathematics.

PATTERNS OF USE

Units of instruction in *Individualized Mathematics* are arranged in a hierarchical structure which permits pupils to proceed through the curriculum following a variety of individual paths.

Essentially all lesson materials have been designed to be self-instructional, and most pupils should be able to use them independently or with only minimum assistance and instruction from the teacher. This means that a major part of teacher time is spent in traveling about the classroom, responding to pupil questions, reinforcing desirable performance, and providing general supervision of independent study activities. However, some teachers choose to introduce certain lessons through small-group instruction, which this curriculum also permits. The objectives, together with the lesson materials and tests that make up the IM program, are intended to provide a complete curriculum in mathematics for kindergarten and 1st and 2d grades. In schools where IM has been implemented thus far, pupils proceed from this program into the *Individually Prescribed Instruction (IPI) Math Curriculum* (as developed at the Learning Research and Development Center and revised by Research for Better Schools). This means that particularly accelerated 2d-grade pupils may move on to appropriate units in IPI math. With both IM and IPI, teachers are also encouraged to make some use of group instruction to clarify and review certain topics and to illustrate everyday applications.

ASSESSMENT PROVISIONS

Individualized Mathematics has a structured testing program which is designed to place each student at the proper point in the curriculum, to diagnose specific needs, and to monitor pupil progress.

(1) Placement tests are used to determine which units a pupil has already mastered and which need to be studied. These consist of separate tests for each unit which can be put together in various ways to provide an appropriate battery for each individual student, depending upon grade level and past performance.

(2) Unit pretests provide a subscore for each objective in a unit, and pupil results are used to ascertain which objectives need to be studied.

(3) Curriculum-embedded tests are short tests measuring the pupil's mastery of one objective and are administered as soon as the pupil completes the study of each objective. These tests are used to aid in deciding when the pupil should move on to the next objective.

(4) Unit posttests are alternative versions of the unit pretests and are used to determine pupil mastery of all objectives in a unit after study in the unit has been completed. Results from such tests provide major data for determining when a pupil should move on to a new unit.

TIME REQUIREMENTS

This is an individualized program, and the amount of time required to complete it will vary greatly from student to student. The typical student will complete most of the curriculum by the end of 2d grade. As indicated earlier, some pupils will complete all units before the end of 2d grade and move on to more advanced work (IPI Math materials have been used to serve this purpose in current implementations). Slower pupils may continue in IM units as they move into 3d grade.

IMPLEMENTATION PROCEDURES

The IM program includes all materials needed for implementation: Tests, lesson materials, prescription forms, student record blanks, and other forms. Current implementations indicate that if a classroom has more than 15 or 20 pupils, a teacher aide or assistant teacher is probably necessary for effective management of the program.

Some form of teacher-training workshop should be provided before teachers start using the program. This type of training has been provided (e.g., in three 2-hour sessions) at the schools where the program has been implemented thus far. However, a formal training program has not yet been designed. Experience suggests that the necessary training can be carried out using all pupil materials plus certain mimeographed documents prepared by the development staff. This training must be provided by someone fully familiar with the program, such as a teacher or supervisor in a school where IM has been used.

The IM program requires storage space for the boxes of manipulative lessons and for lesson booklets, tests, and other materials. The type of storage used may be made a function of what is available. Typical requirements could be met through use of one three-drawer filing cabinet and approximately 30 feet of bookshelf space (on which to file the small boxes containing manipulative lessons).

ASSURANCES AND CLAIMS

Assurances

The *Individualized Mathematics* program has been used for over 3 years in one large central-city school in the city of Pittsburgh and in one smaller suburban school. It was also used in two 1st-grade classrooms in Philadelphia in a 1-year study carried out by Research for Better Schools. Both black and white teachers have used the program, and the total sample of students involved has been over 50 percent black. We have received no reports of racial or sexual bias from any of the persons involved in this total development and implementation process. Also, there have been no reports of any other types of harm resulting from use of the program.

The implementation of this program has been carried out in two schools used for the initial trial of a variety of LRDC programs, but the IM program is now the responsibility of the school administrators and teachers with no supervision from the developers. On the basis of this experience, it can be assumed that the program can be managed by a local school staff with no need for the involvement of development personnel.

Claims

A major goal of the IM program was to develop lesson materials and a system of classroom management with which pupils could use manipulative activities (pairing, counting, comparing sets of concrete objects), largely on an independent study basis, to master specified instructional objectives. The achievement of this goal has been demonstrated in the successful implementation of the program in two elementary schools in the Pittsburgh area and in classrooms in two schools in Philadelphia.

Achievement on standardized tests for pupils using IM has been at, or above, grade level. On tests of "arithmetic concepts," the area in which the program has placed major emphasis, performance has been well above grade level. In general, pupils using IM in the LRDC development schools have shown somewhat higher performance on standardized tests than did pupils using pre-IM programs. This is significant in that these pre-IM programs were also programs for individualized instruction in mathematics and, in turn, had been shown to result in higher achievement than was produced when earlier nonindividualized programs were used.

The *Individualized Mathematics* (IM) program was developed based on knowledge gained through LRDC's experience with its earlier math programs (PEP and IPI). Important inputs were obtained from teachers who were using these earlier programs. IM went through a number of cycles of design-tryout-revision over a 3-year period. These tryouts were conducted in two different schools; and continuous formative evaluation data were obtained from pupil performance on the IM tests, from classroom observation by project staff members, and from reports by teachers. Further evaluation data resulted from an intensive 1-year tryout, conducted by Research for Better Schools, in two classrooms in Philadelphia.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Placement tests	2 sets per student	To be announced	Consumable	
Pretests	22 per student	To be announced	Consumable yearly	
Posttests	11 per student	To be announced	Consumable yearly	
Booklets	65 per student	To be announced	Consumable yearly	
Maintenance materials	4 levels per student	To be announced	Consumable yearly	
Manipulative boxes	90 per classroom	To be announced	Reusable	
10 base arithmetic blocks	1 set per classroom	72.50	Reusable	Creative Publications, Palo Alto, Calif. 94302
Unifix cubes	1 set per classroom	22.50	Reusable	Creative Publications, Palo Alto, Calif. 94302
Counting cubes	1 set per classroom	3.50	Reusable	Creative Publications, Palo Alto, Calif. 94302
Flashcards	16 sets per classroom	1.70	Reusable	Gamco Industries, Big Spring, Tex. 79720
Prescription forms	11 per student	To be announced	Reusable	
Teacher's manual	1 per teacher	To be announced	Reusable	
Testing manual	1 per teacher	To be announced	Reusable	
Answer keys	2 sets per classroom	To be announced	Reusable	
Teacher aide	1 per math classroom	Localy determined		

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15260

C.M. Lindvall, Project Director

AVAILABILITY

A revised inhouse version of *Individualized Mathematics* will be available by November 1975. Materials are currently being revised for the purpose of reducing the cost of the total program. Preliminary negotiations are also underway in an effort to arrange for production by a major publisher. It is being used in two schools in the Pittsburgh area and is available for observation and study at these sites.

Present work on revision and possible publication should result in making the program generally available at a time to be determined by publication schedules.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 017

INDIVIDUALLY PRESCRIBED INSTRUCTION IN MATHEMATICS (IPI), EDITION II

A multimedia program for grades K-6 with planned transfer of responsibility to the student

IPI Mathematics, Edition II (IPI) is a mathematics program for students in grades K-6. An individualized program, Individually Prescribed Instruction (IPI) includes diagnostic and evaluative tests as well as self-instructional materials for specified mathematics content. IPI was designed so that students can enter the program at the level appropriate for them, work at their own rate on materials not already mastered, and work in small groups when the teacher sees a need for such grouping. A principal feature of the IPI instructional strategy is the planned transfer of responsibility from teachers to students for their own instructional management. Self-management, self-initiative, and learning how to learn are important features of IPI.

The content for this product is specified in a continuum of 359 objectives. Edition II objectives, the result of an extensive revision process, evolved from *Individually Prescribed Instruction in Mathematics, Edition I* objectives. Revisions focused on updating content and language, adjusting the sequence of objectives on the basis of field testing, filling in content gaps, and accommodating the shift in program emphasis from one of exemplar-replication to one of greater dependence on inductive-inference learning. The content of the present edition includes those concepts and basic skills taught in contemporary mathematics programs and those measured by commercially available standardized tests.

IPI materials consist of diagnostic tests, self-instructional booklets, unit posttests, and answer keys for all materials. The principal instructional materials are response-dominant self-instructional booklets that direct students to react frequently to instructional questions and/or examples. The booklet provided for each objective contains two instructional sequences and criterion-referenced mastery tests. Audiotapes are available for many of the beginning self-instructional booklets. Although the IPI materials available from the publisher do not include manipulative aids, many of the IPI booklets do, in fact, list specific aids considered appropriate for use with the respective booklets.

Students progress through the IPI continuum at their own rate. The diagnostic tests and the linear nature of the continuum assure that students work only on objectives which they have not already mastered but for which they have the necessary prerequisite skills. Manipulative aids, audiotapes, small-group seminars, and teacher or peer tutoring may be included as part of a student's work on an objective. As students move from the primary to the intermediate grades, they become more responsible for gathering their own learning materials and assessing and planning their work. In the upper elementary grades, students frequently score their own work.

IPI teachers spend most of their time facilitating learning for individual students. Teachers, for example, diagnose student responses on a given IPI pretest and then prescribe the appropriate material in the corresponding instructional booklet. Teachers may also prescribe manipulative materials or small-group instruction for a student, but much of the IPI teacher's time is devoted to tutoring individual students and leading small-group sessions. In the primary grades, teacher aides are employed to score the booklet pages and tests and to record student progress. Teachers as well as aides are trained prior to the program's implementation at a workshop conducted by the school's instructional leader, usually the principal.

SUBJECT AREA(S)

The subject area is elementary school mathematics, including topics in: Numeration/place value, addition, subtraction, multiplication, division, fractions, money, time, systems of measurement, geometry, and applications.

INTENDED USERS AND BENEFICIARIES

The curriculum was designed for all students in grades K-6. The program has also been used successfully by both elementary and junior high school-age children in mainstream classes, programs for "slow learners," and special education classrooms.

GOAL(S) OR PURPOSE(S)

IPI is designed to facilitate the management of individualized mathematics instruction adaptable to a wide variety of classroom settings. The IPI instructional materials and tests are designed to promote student mastery of specified mathematics content. The IPI management scheme permits students to be self-managing and self-initiated learners and frees teachers to tutor individuals or lead small groups. The teacher training materials were designed to inform IPI teachers about program materials and management options, as well as to give them an understanding of their role as tutors and diagnosticians.

PATTERNS OF USE

Three hundred fifty-nine behaviorally stated objectives, organized in a linearly sequenced continuum, specify the content. The objectives are organized into the 10 topic areas listed above. Within each area the objectives are, insofar as possible, sequenced so that each one builds on those that precede it and is a prerequisite to those that follow it. Within the sequence of objectives in each topic area, the objectives are grouped into meaningful subsets or units. These units are designated as representing different levels of progress. Edition II includes seven levels of difficulty labeled A-G. A pupil must demonstrate mastery of all A-level objectives before working in level B, all B-level objectives before working in C, and so forth. At any given level, topic areas are ordered from numeration/place value to applications (see above listing in "Subject Area(s)").

ASSESSMENT PROVISIONS

IPI includes various assessment instruments used for monitoring the student's progress and determining mastery. Placement test results are analyzed to determine whether the student needs to work in a specific unit. Similarly, pretest results indicate those objectives within a given unit in which the student needs instruction. Each self-instructional booklet contains two Curriculum-Embedded Tests (CET's), the results of which are used to determine whether the student has mastered a particular objective. A student's mastery of all the objectives within a given unit is assessed on a unit posttest.

TIME REQUIREMENTS

Individually Prescribed Instruction in Mathematics, Edition II is designed for use during the 30-45 minutes normally assigned to the study of mathematics and related topics.

IMPLEMENTATION PROCEDURES

IPI has been implemented successfully in traditional classrooms, open classrooms, and learning resource centers. The publisher arranges 3-day training sessions for new IPI school instructional leaders, usually the school principal. These training sessions follow the IPI administrative training program and are conducted by principals already using IPI. Using training materials available for such sessions, the newly trained instructional leaders are responsible for training their own teachers and aides. Once implemented, the program can be used without developer assistance.

Summary Cost Information

First-year schools should expect to spend $1,500 for each 150 to 200 students enrolled, based upon estimates by New Century Education Corporation, the product publisher. The minimum order for a new school is $1,500. The minimum for all subsequent replacement orders is $50. The cost per student is variable and depends on patterns of utilization of materials. A recent survey conducted by the publisher of 40 user schools indicated 65 percent of these schools spent less than $7.85 per student and 40 percent spent less than $5. This was based upon 1974-75 prices.

Personnel Required for Product Adoption and Implementation

The developers of IPI mathematics suggest that an aide is desirable in the primary grades (1-3) to handle nonteaching requirements. The publishers provide training for one to three persons free of charge, depending on the amount of the initial order. The trained person is usually the principal and/or other leaders of instruction who, in turn, train all teachers in the school. There are no other necessary support services.

ASSURANCES AND CLAIMS

Assurances

Individually Prescribed Instruction in Mathematics, Edition II, which includes teacher and administrator training packages, can be easily installed and maintained in either open or structured learning settings by classroom teachers without any assistance from the developer. The program has been used by varied student populations in a wide variety of learning settings, ranging from regular classes to compensatory education classes and special education groups (such as, handicapped). Thus, the program has demonstrated transportability and replicability.

IPI Mathematics, Edition II materials are free from social biases. The content of the program is neutral regarding religion, age, and socioeconomic status stereotypes. Male and female and racial representations in the program meet design intentions for social fairness.

Individually Prescribed Instruction in Mathematics, Edition II, an edition revised on the basis of extensive research and field testing, has been in use in hundreds of schools throughout the country for 3 years. Thus far, neither developers nor publishers have received any reports of harmful effects due to the program.

Claims

This product is an individualized and self-instructional K-6 mathematics program. Diagnostic criterion-referenced tests enable the teachers to determine those concepts and skills each student needs to learn and enables them to prescribe relevant instructional materials to individual students (Hambleton, 1974). The program design permits students to study at their own pace. The materials written in response-dominant mode are self-instructional and thereby permit the teacher either to serve as a tutor to individual students or to guide small-group activities. The program design provides students with the opportunity for self-management of learning and self-evaluation of their own achievements.

The Educational Products Information Exchange (EPIE) report offers the opinion that the program can deliver learning in the cognitive dimension. This opinion has been upheld by numerous evaluation results which indicate that *Individually Prescribed Instruction in Mathematics, Edition II* is effective when it is properly implemented and when measures used for the evaluation are valid. Its effectiveness is outstanding in terms of students' achievement on standardized tests, especially when it is employed for a second year and beyond. More than 90 percent of the reviewed evaluation studies demonstrated its superiority in the affective domain as compared with other similar programs.

The program is manageable by a trained teacher. However, a trained aide is considered necessary in primary grades. Thoughtful scheduling would permit one aide to serve five or six classes. Virtually no changes of existing school resources are required.

The content is accurate, comprehensive, and contemporary. These aspects have been established through outside expert opinion, evaluation results from field testing, and reports by more than 400 teachers in the research for better schools nationwide-network of schools.

Individually Prescribed Instruction in Mathematics, Edition II was developed on the basis of sound instructional theory (Glaser, 1965) and through an extensive research-development-field testing-revision model. This continuing improvement and revision process based on empirical evidence helps to insure the intrinsic quality of the program and to progressively build a substantive body of instructional theory on a more rational and less dogmatic foundation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item* in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Placement test	3 per pupil	1.45 per package of 10	Consumable yearly	
Pretests	20 per pupil	1.05 per package of 10	Consumable yearly	
Skill booklets	50 per pupil	1.45 per package of 10	Consumable yearly	
Posttests	10 per pupil	1.05 per package of 10	Consumable yearly	
Student folder	1 per pupil	.20 per package of 10	Reusable yearly Answer Keys for booklets and tests	
Teacher and aide training materials	For new teachers and aides only	12.50 per set	Reusable	
1 set of tape cassettes for selected A- and B-level skills	Optional	145.00 per set	Reusable	

*Prices for 1975-76 school year.

DEVELOPER/AUTHOR:

**Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15260**

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

AVAILABILITY

***Individually Prescribed Instruction in Mathematics, Edition II* was copyrighted in 1972, and copyright is claimed until 1982. IPI mathematics is currently available from the publisher:**

**New Century Education Corp.
440 Park Ave. South
New York, N.Y. 10016**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 018

INDIVIDUALIZED MIDDLE MATHEMATICS (IMM), LEVELS I AND II

A mathematics program allowing entry of students at individual rates and work pace

Individualized Middle Mathematics (IMM) is an instructional program for students in grades 7 and 8. An individualized program, IMM includes self-instructional materials for specified mathematics content as well as diagnostic and evaluative tests. IMM was designed so that students can enter the program at an appropriate level, work at their own rate on material not already mastered, and work in small groups or in a teacher-guided group activity. IMM students manage much of their own learning—scoring pages, recording progress, selecting the order in which they will study certain topics, and selecting from among optional activities. Self-management, self-initiative, and learning how to learn are a part of IMM.

IMM content is primarily a synthesis of contemporary junior high mathematics programs developed during the reform projects of the sixties and more recent movements that include manipulative and laboratory work as part of instruction. Learners from any elementary math program who have mastered the stated prerequisite skills can use the program. Levels I and II contain content usually associated with the 7th grade. (Forthcoming levels III and IV will cover 8th-grade content.) The program is organized into seven areas: Foundations, integers, rationals and reals, geometry and measurement, probability and statistics, equations and inequalities, and applications. IMM provides the developmental/intuitive experiences which are necessary to the academic sequence of middle mathematics, e.g., algebra, geometry. At the same time, it takes into consideration that many students will use mathematics primarily in applied rather than academic situations. For this reason, the program contains a broad spectrum of activities including optional special activities for both enrichment and maintenance.

IMM instructional materials consist of diagnostic tests, self-instructional booklets, unit posttests, special activities, and answer keys. The principal instructional materials are response-dominant, self-instructional booklets that direct students to frequently react to problems or instructional questions. The self-instructional booklet contains diagnostic-prescriptive instruments, two instructional sequences, and criterion-referenced mastery tests.

Throughout the IMM program, students learn to make choices. They choose the order in which units are studied, which special activities they will complete, whether they will work independently or in small groups, and when to seek help from the teacher. As they progress through the program, they become increasingly capable of working independently, of scoring their own materials, and of keeping necessary progress records. Since some of the topics in junior high level mathematics are not sequentially dependent upon each other, the IMM hierarchy of objectives permits students to proceed through the program by different sequences.

IMM gives the teacher more time to become involved in the learning activities of individual students. The teacher can choose to instruct small groups of students who are working on a common topic or to tutor individual students. Individualized teacher training materials provide an overview of the program, describe the function and intended use for the program components, and give plans and suggestions for program management.

SUBJECT AREA(S)

Mathematics, including topics in foundations, integers, rationals and reals, geometry and measurement, probability and statistics, equations and inequalities, and applications are the subject areas.

INTENDED USERS AND BENEFICIARIES

(*Individualized Middle Mathematics*) Levels I and II is primarily for 7th-grade students who have a mastery of the limited number of stated prerequisite behaviors. The complete IMM program, levels I-IV, is designed for those learners in grades 6-9 who have the prerequisite skills.

GOAL(S) OR PURPOSE(S)

IMM is designed to facilitate the management of individualized mathematics instruction that is adaptable to a wide variety of classroom settings. The IMM instructional materials and tests are designed to promote student mastery of specified mathematics content. The IMM management scheme permits students to be self-managing and self-initiated learners and frees teachers to tutor individuals or small groups. The teacher training program was designed to inform IMM teachers about program materials and management and to give teachers an understanding of their role as tutors and diagnosticians.

PATTERNS OF USE

Units within each topic area are ordered. A student must demonstrate mastery of the objectives for rationals and reals at level I before going to level II. However, at any level, students may choose the units they wish to study. There are two limitations: The student must demonstrate mastery of the objectives in Level I Foundations before working in any other unit; and at all levels, the student must demonstrate mastery of the objectives in all other units at that level before working in the equations and inequalities unit and the applications unit. The equations and inequalities unit must be completed before beginning work in the applications unit. An additional option for the student continuing to the next level in a given area is also provided. For example, after demonstrating mastery of all the objectives in Geometry Level I, the student may study the geometry objectives at level II before completing the rest of the units at level I. Within units, objectives may be studied either in numerical order or in the order of a specified hierarchy.

ASSESSMENT PROVISIONS

IMM includes various assessment instruments that monitor the student's progress and determine mastery. An entry test determines whether the student has the prerequisite skills for the program; placement tests determine whether the student needs to work in a specific unit; and pretests indicate which objectives within a unit a student needs to work on. Diagnostic-prescriptive instruments help prescribe specific pages in the appropriate instructional booklet. Each booklet contains two checkup tests that determine whether the student has mastered a particular objective. Finally, posttests determine the student's mastery of all the objectives in a unit. Each of the above tests is criterion referenced.

TIME REQUIREMENTS

IMM should be used daily for 45 to 60 minutes. Field test data indicate that a slightly above-average student will complete level I and level II in 1 school year.

IMPLEMENTATION PROCEDURES

IMM can be implemented in any kind of school setting and can easily be adapted to both specialized and self-contained school organizations. The only additional required equipment is shelving or storage space for the instructional booklets. The teacher training program is self-instructional and takes approximately 16 to 20 hours.

Summary Cost Information

The above-mentioned costs are based upon present limited reproduction facilities of the developer. It is expected that commercialization of the product will substantially reduce costs. The total estimated cost per student, with present production arrangements, is $35 per year. This price includes skill booklets, all evaluative measures, and all management forms necessary for operation of the program. The cost of the IMM teacher training package is estimated at $15 per teacher.

Personnel Required for Product Adoption and Implementation

Completion of the IMM teacher training package is required for implementation of the program. However, no other special qualificiations or training is necessary, and all teachers who desire to implement IMM in their classrooms should be able to do so. Also, no aide is required for implementation of the program.

ASSURANCES AND CLAIMS

Assurances

The IMM program, presently being developed, is being continuously revised in order to ascertain and assure its intrinsic quality.

The information obtained from a systems tryout evaluation of the program at two junior high schools indicates that IMM can be used satisfactorily without the developer's continuous assistance. When the teacher training unit revisions are completed, the IMM program is intended to be implemented and maintained by teachers without developer assistance.

The IMM materials in the final product will be free from social biases. Each piece of material is reviewed by both an in-house evaluation panel and outside experts in terms of sexism, racism, and other biases related to religion, age, and socioeconomic status stereotypes.

Each piece of the IMM materials and the instructional system were field tested over a 2-year period at 2 developmental schools involving more than 200 students. No harmful effects were observed by evaluators or developers, nor were any reported by the teachers using the program. These same teachers concluded that IMM is at least as effective as, if not more effective than, alternatives which had been used in their schools in prior years.

IMM materials are also carefully scrutinized by the committee for the protection of human subjects (Research for Better Schools, Inc., 1972) to certify that they are free from potential harmful effects and social biases.

Claims

IMM is an individualized and self-instructional middle school mathematics program whereby: Diagnostic criterion-referenced tests enable students to determine those concepts and skills they need to learn as well as to identify relevant instructional materials; the program design permits students to study at their own pace, to decide the order in which topic areas will be studied and to be selective in respect to optional special activities; IMM materials written in response-dominant mode are self-instructional and thereby permit the teacher to serve either as a tutor to individuals or to guide small-group activities; and the program design provides students the opportunity for self-management of learning and self-evaluation of their own achievements.

Comparison of criterion-referenced premeasures and postmeasures shows that students do, in fact, master the concepts and skills included in the IMM program. Field test results of students at two local schools show that students have exhibited considerable progress which, in many cases, was beyond the expectations of the teachers and developers. Teachers have indicated their satisfaction with the cognitive learning exhibited by their students and with the efficiency by which students learned. Teachers and students express very positive and enthusiastic attitudes toward the IMM program.

Field test results indicate that the IMM program can be managed by one teacher and appears to be adaptable to a variety of learning environments and student populations with virtually no changes of existing school resources.

Content validity of the IMM program has been established. An analysis by the developers of the content of nine junior high school mathematics text series and three standardized mathematics achievement tests provided the basic outline for the program. Reviews by outside experts and by the teachers using the program have established the instructional materials' intrinsic quality in such areas as accuracy, coverage, and quality of communication.

IMM is being developed on the basis of a successive approximation model, incorporating a four-stage evaluation and three-stage revision process. This process helps to insure that the development of the product meets design specification.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Skill booklets	80 per student (part I)	25.00*	Consumable	
	20 per student (part II)	5.00*		
Pretests and posttests	24 per student	4.00*	Consumable	
Prescription sheets and miscellaneous management forms	10 per student	.20*	Consumable	
Placement tests	2 per student	.80*	Consumable	
Teacher training materials	1 set per teacher	15.00*	Consumable	

*Approximate, based on estimates of cost to developer of reproducing prototype copies. Commercial production will reduce costs significantly.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Anna O. Graeber, Project Coordinator

AVAILABILITY

Revisions based on tryouts are completed for level I; revisions based on tryouts will be completed for level II by June 1975. Arrangements can be made to purchase copies of these level I and II materials from the developer for use in the 1975-76 school year. Final prepublication copies of all levels (I-IV) will be available by August 1977. An evaluation report on the effectiveness of IMM will be completed by November 1977.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 019

METRIC MEASUREMENT

An individualized program for students in grades 3-7 giving concrete experience in using the metric system

Metric Measurement is an instructional unit designed to give students concrete experiences with the use of measuring devices calibrated in metric units. The unit provides individualized instruction in metric measurement for students in grades 3-7. The students learn to measure length, volume, temperature, and mass, using the appropriate metric units. In each instance, they use measuring devices to make actual measurements. The students make measurements of length, width, and height, both of printed objects and of objects around the classroom; learn to measure volume by working with solids and liquids in various containers; measure mass with a balance and set of standard masses; and measure temperatures using a Celsius thermometer and containers of water. They also learn to record measurements, using abbreviations of the metric units.

The learning resources used in *Metric Measurement* include self-instructional lessons, read-along audiotapes, guided explorations in measurement, measuring games, project activities, and a sound filmstrip on the life and work of Joseph Louis Lagrange, one of the originators of the metric system.

Today's children will soon live in a world where butter is measured in kilos; gasoline, in liters; distances between cities, in kilometers; and air temperature, in degrees Celsius. To function in such a world, the individual must have a basic knowledge of the units of the metric system and must be able to make measurements using metric units.

SUBJECT AREA(S)

The subject areas are science and mathematics, specifically measuring in metric units and knowing the metric system.

INTENDED USERS AND BENEFICIARIES

Students of all abilities in grades 3-7.

GOAL(S) OR PURPOSE(S)

Metric Measurement is designed to teach the child: (1) To make measurements of length, volume, mass, and temperature using appropriate metric units and (2) to apply metric measurement skills in science investigations and practical situations.

PATTERNS OF USE

Metric Measurement is a self-contained instructional unit. All printed and manipulative materials are provided, and it is organized with a built-in learning management system that makes individualization of instruction possible.

The unit is divided into four instructional modules on measuring length, volume, mass, and temperature. The modules may be used in any order, but the lessons within each module are sequential. The guided explorations in measurement, project activities, and other learning resources may be used in any order.

The unit is suitable for either basic or supplementary instruction in metric measurement for grades 3-7.

ASSESSMENT PROVISIONS

Students take a pretest as they begin the unit. The pretest helps to determine in which of the four modules they should work. The lessons in each module contain self-assessment exercises. A posttest for the unit is also provided.

TIME REQUIREMENTS

The amount of time an individual student spends in the unit varies considerably, since the unit provides for varying rates of learning and for choices in the learning resources. On the average, however, the unit provides instruction for 20-25 class periods.

IMPLEMENTATION PROCEDURES

No special equipment, facilities, or organization is required. A comprehensive teacher's manual and a teacher training cassette tape accompany the unit.

ASSURANCES AND CLAIMS

Assurances

There is no evidence that *Metric Measurement*, when used as directed, induces physical, psychological, or social harm. It should be noted that many activities in the unit involve the use of apparatus and manipulatives by children, so that occasional minor mishaps should be expected. A few burned fingers were observed during prototype and field testing, but no incident was serious. Appropriate cautions about potential mishaps are contained in the directions of the student instructional materials.

There is no evidence that *Metric Measurement* perpetuates sexism, racism, or other biases related to religion, age, or socioeconomic stereotypes. These assurances are based upon critical examinations of the materials and on observations during their field testing.

The instructional materials of *Metric Measurement* were field tested apart from the developers' control in four schools at various grade levels. The developers also have no direct control over use of the commercial version of the unit, and at this writing (March 1975) approximately 800 copies of *Metric Measurement* have been marketed.

Claims

The instructional materials in *Metric Measurement* were originally developed for the Lagrange Unit of the *Individualized Science* (IS) program. For the commercial version of *Metric Measurement*, little was changed except the names of the unit and some learning resources. The same sequence of development used for all units of the IS program was also followed for this unit.

Each IS unit undergoes extensive formative evaluation. The science content is validated by a member of a panel of university scientists. Classroom testing of the materials takes place in two steps. A small-scale classroom test of prototype materials is carried out by the developers. Then a more comprehensive field test of materials is carried out by Research for Better Schools. After each of these classroom tests, revisions are made. (Further discussion of this process can be found in Audrey B. Champagne's and Leopold E. Klopfer's, "Formative Evaluation in Science Curriculum Development," *Journal of Research in Science Teaching*, 1974, 11, 185-203.)

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set, including booklets, read-along audiotapes, kits, central supply materials, activity cards, etc.; planning booklets and other consumable student paperwork for 30; teacher's manual	1 set per 30 students	450.00*	$2.00 yearly per 30 students	
Additional set of consumable student paperwork	1 set per 30 students	36.00	$36.00 yearly	
Cassette tape player	2 per classroom	25.00-40.00	Every 4 years	Any A-V supplier
35mm filmstrip viewer or projector	1 per classroom	30.00-55.00	Every 5 years	Any A-V supplier
Hotplate	1 per classroom	10.00-18.00	Every 5 years	
Set of spirit masters for consumable student paperwork	1 set per 250 students	4.95	$4.95 yearly	

*Set also available without read-along audiotapes at $329.00.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15260

AVAILABILITY

The complete unit has been published, and copyright is claimed from 1973 to 1984.

The distributor is:
Imperial International Learning Corp.
Box 548, Route 45 South
Kankakee, Ill. 60901

A program evaluation pack (containing a teacher's manual, sample lesson booklets, a kit of manipulatives, student paperwork, read-along tapes, and the Lagrange sound filmstrip) is available on loan from the distributor at no cost.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 020

INDIVIDUALIZED LEARNING FOR ADULTS - MATHEMATICS

A mathematics curriculum consisting of a carefully structured continuum of skills designed to lead to a 9th-grade mathematics skill level

Individualized Learning for Adults (*ILA*) *Mathematics* is an adult mathematics curriculum that consists of a carefully structured continuum of skills designed to lead the learner to an approximate 9th-grade mathematics skills level. It is appropriate for any young adult or adult learner whose functional level in mathematics skills is below 9th grade.

The program was developed in response to three major problems in Adult Basic Education (ABE) identified by the Nevada Department of Education in 1969. These were: (1) The large number of ABE dropouts, (2) the lack of appropriate instructional materials, and (3) the high mobility of the undereducated adult. Individualized instruction appeared to be a reasonable solution to all three problems. Therefore, *Individually Prescribed Instruction* (IPI), a program developed for and extensively disseminated to elementary school populations, was used as a model in developing ILA for use by adult learners.

The program is organized into five areas: Numeration/place value, addition/subtraction, multiplication/division, geometry/measurement, and applications. Within each area, performance objectives are divided into eight levels and arranged in ascending order of difficulty. There are 282 mathematics skill objectives.

The student's placement within the program is determined by a series of five placement tests. Pretests assess strengths and weaknesses within a given area. The student is given prescribed learning activities for each area comprised of 282 skill booklets, 1 for each skill objective. Each booklet contains two evaluative skill tests that monitor the student's progress through that particular objective. Mastery is determined by a posttest. Students work at their own pace and study only those objectives not previously mastered. The ILA teacher's primary responsibilities include: Managing the learning process, tutoring individuals and small groups, and serving as a resource person to the learner. To free the teacher from routine clerical tasks, developers recommend the use of an aide for noninstructional duties.

SUBJECT AREA(S)

Adult basic education—mathematics.

Numeration/place value, addition/subtraction, multiplication/division, geometry/measurement, and applications are the subject areas.

INTENDED USERS AND BENEFICIARIES

The program has been specially designed for adult and young adult learners who have not mastered the mathematics skills usually taught in grades 1 through 9 of the public schools.

GOAL(S) OR PURPOSE(S)

ILA seeks to improve the mathematics skills of undereducated adults and young adults through an individualized instructional system which emphasizes purposeful, self-directed learning. The learner completing the entire continuum will have an approximate 9th-grade mathematics skills level.

PATTERNS OF USE

The program can be used in essentially any Adult Basic Education (ABE) setting. Field testing has validated its use in ABE classes, secondary schools, and correctional institutions. ILA is largely self-managed and self-instructional. Developers encourage the use of supplementary materials when appropriate, but point out that the program is not amenable to substantive change.

ASSESSMENT PROVISIONS

The student's entry into the appropriate level of the program is determined by a series of five placement tests. Pretests, taken before work in a specific area is begun, measure the student's skills within that area. Skill tests embedded in the instructional booklets monitor progress toward objectives. Posttests measure the mastery of areas.

TIME REQUIREMENTS

The length of time required to complete the continuum will vary depending on the achievement and motivational level of the entering student.

IMPLEMENTATION PROCEDURES

The consumer who is comfortable with the use of performance objectives as guides to instruction and who is philosophically attuned to the values of individualization, should have no serious problem with implementing the program. If used with secondary students, parent awareness of the system and its objectives will facilitate implementation. The program is packaged for use as an instructional unit and requires minimum external assistance for successful implementation.

Summary Cost Information

The above costs are estimated for 50 students. Installation costs total $4,927.44. Average cost per student is $98.55 for total installation and $57.55 for the consumable materials. Consumable materials can be replaced at $0.02 per sheet.

Personnel Required for Product Adoption and Implementation

The program was intended for use with 1 teacher for every 20 students in instructional settings. Clerical support needs have been estimated at 1 clerk per approximately 100 students. Translating this into personnel (full-time equivalent) requires a determination of how much time each student will spend in the program.

ASSURANCES AND CLAIMS

Assurances

This product has been evaluated during use with over 400 secondary school students and approximately 300 prison inmates. In each case, the product functioned as a central element in a basic skills program. The assessment of results was conducted by an internal evaluation staff. Evaluation of the product in a secondary school setting was supervised by the National Institute of Education. This evaluation provided the most extensive source of data on the product. Evaluative evidence was gathered in a rigorous fashion using well-developed designs and instrumentation and, thus, may be accorded high credibility.

During the product's use in secondary school contexts, student achievement and attitudes in numerous areas were documented. Practitioners were also frequently consulted concerning the effects of the product on students. In no case were negative effects demonstrated. Thus, there has been no indication that the product induces or facilitates any type of harm.

To assure social fairness, product developers have critiqued their own work, National Institute of Education staff and consultants have reviewed the product, and mechanisms have been employed to obtain user feedback. These sources have not revealed any social bias or stereotyping inherent in the product.

Successful use of the product in a variety of settings has demonstrated its replicability and transportability. Instructional materials are available as a package. To date, technical assistance has been provided to users in implementation of the product. Some assistance from the developer is seen as desirable.

Claims

The major outcome claim made for the product is that it facilitates basic skills attainment. This claim has been supported by the evaluation of results from secondary students and prison inmates. In all cases, academic growth has been substantial and statistically significant during the course of product use. Comparative studies with other programs have been limited to date, but suggest that the product is at least as successful as other approaches.

The major process claim made for the product is that it allows students to progress at their own rates through materials which are perceived as beneficial and interesting. This claim was tested using student questionnaires and interviews. Students rated the product as above average on items relevant to this claim.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil prescription sheets	75	9.00	Yearly	
Pupil profile	75	1.50	Yearly	
Training materials	2 sets	8.00	Yearly	
Entrance tests:	1,940	38.00	Yearly	
Level A	1,592	31.84	Yearly	
Level B	3,475	69.50	Yearly	
Level C	13,680	273.60	Yearly	
Level D	25,660	513.20	Yearly	
Level E	34,274	685.48	Yearly	
Level F	34,018	680.36	Yearly	
Level G	16,728	334.56	Yearly	
Level H	11,580	231.60	Yearly	
Pocket folders	50	10.00	Yearly	Commercial supplier
4-drawer file cabinet	6	600.00	Reusable	Commercial supplier
Accordion folders	500	150.00	Reusable	Commercial supplier

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The complete ILA mathematics program has been available for use since July 1972. Product materials may be obtained from:

Research for Better Schools, Inc.
Suite 1700, 1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 021

NUMBER SKILLS PARENT TEACHING PACKAGE

*A portable package designed to teach (individually)
children from grades K-3 to match, name, and
count the numbers 1-10*

Number Skills Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to teach the child to match, name, and count the numbers 1 through 10. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program (*Parent Teaching Package*) would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The ability to match, name, and count is a critical prerequisite skill to math computation skills. The need for this package is evident especially at the preschool and kindergarten levels.

In this package the student is required: To demonstrate the ability to match the numbers 1 through 10 on a number board without any errors (manual response—no verbal response necessary); name the numbers 1 through 10 aloud without any errors; and to count the numbers 1 through 10, in sequence, without any errors.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills. The parent begins each daily lesson by reading its general guidelines and setting up the number board and cards as indicated in the guidelines.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

SUBJECT AREA(S)

The subject area is mathematics; specifically, how to match, name, and count the numbers 1 through 10.

INTENDED USERS AND BENEFICIARIES

This package is intended for children in kindergarten to 3d grade who cannot match, name, or sequence the numbers 1 through 10.

This package is designed to be used by parents in the house on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to match, name, and count the numbers 1 through 10.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to match the number cards (1-10) on a number board. If the student makes no errors, the student is asked to name the numbers 1 through 10. Upon completing this part of the test correctly, the student is asked to count aloud the numbers 1 through 10. The student who does not obtain acceptable error criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the student progress sheet, which requires the parent to indicate with an "X" or a "/" whether the student did complete the lesson without any errors or whether it needs to be repeated in the next session. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the student progress record sheet is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Number Skills Parent Teaching Package* as itemized above is $2.25 (price subject to change). The package is completely reusable except for the progress sheets (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages*. At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Number board (1-10)	1	.55	Reusable	
Set of number cards (1-10)	1	.50	Reusable	
Parent-teacher chart	1	.05	Consumable each time program is implemented	
Thermometer chart	1	.05	Same as above	
Evaluation form	1	.05	Same as above	
Letter to parent	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Number Skills Parent Teaching Package **has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 022

MATH COMBINATIONS – ADDITION PARENT TEACHING PACKAGE

A portable package designed to teach individual children answers to mathematics combination facts in addition

Math Combinations—Addition Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to provide practice in saying and writing spontaneously the correct answers to math combination facts in addition that the child knows and to teach answers to math combination facts in addition that the child does not know. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because there are many children having difficulty with computation skills. Being able to write and say the answers to math combination facts in addition quickly will make it easier for a child to do more difficult math problems quickly and accurately later on.

In this package, the student is required to respond to the visual image of the number combination by saying the answer to that number combination as quickly as the student can. The student is also required to write the answers to the number facts as quickly as it is possible to manually respond. As the lessons progress, the student is expected to increase the speed in saying and writing the answers to the combination facts in addition.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills. Afterwards, the parent administers the pretest to the child to determine which number combination facts in addition the child knows and which facts are not known. The parent then begins daily lessons using the stack of addition combination facts that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Saying and writing answers to combinations.
2. Practice in saying answers to combinations fast.
3. Practice in writing answers to combinations fast.
4. Daily timed test—saying answers fast.
5. Daily timed test—writing answers fast.

The lesson terminates in approximately 20 minutes, and at that time the parent and student record the seconds and number of answers, correct and incorrect, on the progress record form.

SUBJECT AREA(S)

The subject area is elementary level mathematics; specifically, memorizing, writing, and saying addition math combination facts automatically.

INTENDED USERS AND BENEFICIARIES

This package is for any elementary grade student who does not know how to say and write the answers to the addition math combination facts automatically.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say and write the answers to 100 addition math combination facts automatically when presented the visual number combination.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the *Math Combinations—Addition Parent Teaching Package*. The student is asked to write the answers to number combinations presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the progress record form, which requires the parent to record the seconds and the number of answers, correct and incorrect. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress record form is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Math Combinations—Addition Parent Teaching Package* as itemized above is $2 (price subject to change). The package is completely reusable except for the progress record form (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages*. At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

RD 020 022

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 100 addition math combination cards	1	.85	Reusable	
Progress record form	1	.05	Consumable each time program is implemented	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

The *Math Combinations—Addition Parent Teaching Package* has been through formative evaluation. Each package is presently sold at cost of reproduction through:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 023

MATH COMBINATIONS – SUBTRACTION PARENT TEACHING PACKAGE

A portable package designed to teach individual children answers to combination facts in subtraction

Math Combinations—Subtraction Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to provide practice in saying and writing spontaneously the correct answers to math combination facts in subtraction that the child knows and to teach answers to math combination facts in subtraction that the child does not know. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because there are many children having difficulty with computation skills. Being able to write and say the answers to math combination facts in subtraction quickly will make it easier for a child to do more difficult math problems quickly and accurately later on.

In this package, the student is required to respond to the visual image of the number combination by saying the answer to that number combination as quickly as the student can. The student is also required to write the answers to the number facts as quickly as it is possible to manually respond. As the lessons progress, the student is expected to increase the speed in saying and writing the answers to the combination facts in subtraction.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills. Afterwards, the parent administers the pretest to the child to determine which number combination facts in subtraction the child knows and which facts are not known. The parent then begins daily lessons using the stack of subtraction combination facts that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Saying and writing answers to combinations.
2. Practice in saying answers to combinations fast.
3. Practice in writing answers to combinations fast.
4. Daily timed test—saying answers fast.
5. Daily timed test—writing answers fast.

The lesson terminates in approximately 20 minutes, and at that time the parent and student record the seconds and number of answers, correct and incorrect, on the progress record form.

RD 020 023

SUBJECT AREA(S)

The subject area is elementary level mathematics; specifically, memorizing, writing, and saying subtraction math combination facts automatically.

INTENDED USERS AND BENEFICIARIES

This package is for any elementary grade student who does not know how to say and write the answers to the subtraction math combination facts automatically.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say and write the answers to 102 subtraction math combination facts automatically when presented the visual number combination.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the *Math Combinations—Subtraction Parent Teaching Package*. The student is asked to write the answers to number combinations presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the progress record form, which requires the parent to record the seconds and the number of answers, correct and incorrect. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress record form is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Math Combinations—Subtraction Parent Teaching Package* as itemized above is $2 (price subject to change). The package is completely reusable except for the progress record form (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consist of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 102 subtraction math combination cards	1	.85	Reusable	
Progress record form	1	.05	Consumable each time program is implemented	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

The *Math Combinations—Subtraction Parent Teaching Package* has been through formative evaluation. Each package is presently sold at cost of reproduction through:
Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 024

CARRYING AND BORROWING PARENT TEACHING PACKAGE

A package designed for individual instruction of elementary students in carrying and borrowing in addition and subtraction

Carrying and Borrowing Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to teach the child who needs instruction and practice how to carry and borrow in addition and subtraction. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program (*Parent Teaching Package*) would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The package is designed to meet the needs of those children experiencing difficulty in learning this process. The process of carrying and borrowing is critical to advanced computational skills.

In this package the student is required to say the answers to addition and subtraction math combination facts that are presented on cards and to read and write the answers to carrying problems in addition and to borrowing problems in subtraction. As the lessons progress, the student is expected to increase the speed with which the student says the combination facts and writes the answers to carrying and borrowing problems.

The parent begins by reading the *Parent's Direction Book*. The book trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The parent administers the pretest to the student to determine whether this is the appropriate package for the student. The pretest measures the student's knowledge of addition and subtraction math combination facts. If the student passes the pretest, the parent then begins daily lessons.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Daily math combinations review (in addition and subtraction combination facts),
2. Parent and student recording of step 1 results by marking the seconds and correct/incorrect answers given on the record sheet,
3. Teaching carrying and borrowing,
4. Independent practice,
5. Parent and student recording of step 4 results by marking the seconds and correct/incorrect answers given to carrying and borrowing problems on the independent practice sheet.

SUBJECT AREA(S)

The subject area is elementary level mathematics; specifically, how to respond automatically to the math combination facts in addition and subtraction and increase the speed with which the child is able to compute problems in carrying and borrowing.

INTENDED USERS AND BENEFICIARIES

This package is for any student in the elementary grades who does not know how to carry and borrow in addition and subtraction.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to carry and borrow in addition and subtraction.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to answer problems in carrying and borrowing presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

Student progress is recorded at the completion of step 1 in a daily lesson on "Record Sheet: Part 1. Daily Math Combinations Review." Progress is also recorded at the end of step 4 in a daily lesson on "Independent Practice Sheet—Part 4."

This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress sheets are sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Carrying and Borrowing Parent Teaching Package* as itemized above is $3.75 (price subject to change). The package is completely reusable except for the progress sheets, pretest (which can be reproduced), the letter to the parent, and the evaluation form (which also can be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student's daily lesson book	1	.75	Reusable	
Parent's direction book	1	1.00	Reusable	
Set of addition math combination cards	1	.85	Reusable	
Set of subtraction math combination cards	1	.85	Reusable	
Answer key to pretest	1	.10	Reusable	
Record sheet for part 1	1	.05	Consumable each time program is implemented	
Record sheet for part 4	1	.05	Same as above	
Pretest	1	.10	Same as above	
Evaluation sheet	1		Same as above	
Letter to parent	1		Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Carrying and Borrowing Parent Teaching Package **has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 025

MATH COMBINATIONS - MULTIPLICATION PARENT TEACHING PACKAGE

A portable package designed to teach individual children answers to combination facts in multiplication

Math Combinations—Multiplication Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to provide practice in saying and writing spontaneously the correct answers to math combination facts in multiplication that the child knows and to teach answers to math combination facts in multiplication that the child does not know. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because there are many children having difficulty with computation skills. Being able to write and say the answers to math combination facts in multiplication quickly will make it easier for a child to do more difficult math problems quickly and accurately later on.

In this package, the student is required to respond to the visual image of the number combination by saying the answer to that number combination as quickly as the student can. The student is also required to write the answers to the number facts as quickly as it is possible to manually respond. As the lessons progress, the student is expected to increase the speed in saying and writing the answers to the combination facts in multiplication.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills. Afterwards, the parent administers the pretest to the child to determine which number combination facts in multiplication the child knows and which facts are not known. The parent then begins daily lessons using the stack of multiplication combination facts that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Saying and writing answers to combinations,
2. Practice in saying answers to combinations fast,
3. Practice in writing answers to combinations fast,
4. Daily timed test—saying answers fast,
5. Daily timed test—writing answers fast.

The lesson terminates in approximately 20 minutes, and at that time the parent and student record the seconds and number of answers, correct and incorrect, on the progress record form.

RD 020 025

SUBJECT AREA(S)

The subject area is elementary level mathematics; specifically, memorizing, writing, and saying multiplication math combination facts automatically.

INTENDED USERS AND BENEFICIARIES

This package is for any elementary grade student who does not know how to say and write the answers to the multiplication math combination facts automatically.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say and write the answers to 100 multiplication math combination facts automatically when presented the visual number combination.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the *Math Combinations—Multiplication Parent Teaching Package*. The student is asked to write the answers to number combinations presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the progress record form, which requires the parent to record the seconds and the number of answers, correct and incorrect. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress record form is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Math Combinations—Multiplication Parent Teaching Package* as itemized above is $2 (price subject to change). The package is completely reusable except for the progress record form (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages*. At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 100 multiplication math combination cards	1	.85	Reusable	
Progress record form	1	.05	Consumable each time program is implemented	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; hence, they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

The *Math Combinations—Multiplication Parent Teaching Package* has been through formative evaluation. Each package is presently sold at cost of reproduction through:
Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 026

MATH COMBINATIONS – DIVISION
PARENT TEACHING PACKAGE

A portable package designed to teach individual children answers to mathematics combination facts in division

Math Combinations—Division Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to provide practice in saying and writing spontaneously the correct answers to math combination facts in division that the child knows and to teach answers to math combination facts in division that the child does not know. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because there are many children having difficulty with computation skills. Being able to write and say the answers to math combination facts in division quickly will make it easier for a child to do more difficult math problems quickly and accurately later on.

In this package, the student is required to respond to the visual image of the number combination by saying the answer to that number combination as quickly as the student can. The student is also required to write the answers to the number facts as quickly as it is possible to manually respond. As the lessons progress, the student is expected to increase the speed in saying and writing the answers to the combination facts in division.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills. Afterwards, the parent administers the pretest to the child to determine which number combination facts in division the child knows and which facts are not known. The parent then begins daily lessons using the stack of division combination facts that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Saying and writing answers to combinations
2. Practice in saying answers to combinations fast
3. Practice in writing answers to combinations fast
4. Daily timed test—saying answers fast
5. Daily timed test—writing answers fast.

The lesson terminates in approximately 20 minutes, and at that time the parent and student record the seconds and number of answers, correct and incorrect, on the progress record form.

SUBJECT AREA(S)

The subject area is elementary level mathematics; specifically, memorizing, writing, and saying division math combination facts automatically.

INTENDED USERS AND BENEFICIARIES

This package is for any elementary grade student who does not know how to say and write the answers to the division math combination facts automatically.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say and write the answers to 100 division math combination facts automatically when presented the visual number combination.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the *Math Combinations—Division Parent Teaching Package*. The student is asked to write the answers to number combinations presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the progress record form, which requires the parent to record the seconds and the number of answers, correct and incorrect. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress record form is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Math Combinations—Division Parent Teaching Package* as itemized above is $2 (price subject to change). The package is completely reusable except for the progress record form (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages*. At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 100 division math combination cards	1	.85	Reusable	
Progress record form	1	.05	Consumable each time program is implemented	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

The *Math Combinations—Division Parent Teaching Package* has been through formative evaluation. Each package is presently sold at cost of reproduction through:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 027

TIME TELLING PARENT TEACHING PACKAGE

A portable package designed to teach individual children how to tell time to the nearest minute

Time Telling Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to teach the child to tell time to the nearest minute using the "2:45" method. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program (*Parent Teaching Package*) would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

Time telling is a critical social skill. This package was designed to meet the need of teaching children to tell time correctly. This package is a highly programed learning sequence in which the student is required to respond by writing the correct answer for each frame in the student book. The student then checks the answer by pulling down a slider which has been covering the answer. If the student's answer corresponds with the answer in the answer column, the student continues to the next frame. If the student makes an error, the wrong answer is changed to the correct one and the student continues to the next frame.

The parent begins by reading the parent's manual. The manual presents an overview of the program and what the parent needs to know before daily lessons can begin. The parent then reads the complete "Parent's Key to Book A," which trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual, parent keys, and student books are the total training components for both parent and child.

The parent begins by teaching the student how to check the answers. The core of the daily lesson consists of the following steps:

1. Teach the lesson (the student writes the answers to the practice exercises in the student book as the parent follows the parent's key).
2. The student completes the review test.
3. If the student passes the test, the student then records the progress made on the thermometer chart. If the child does not pass the test, then the practice exercises are repeated.
4. Record successful/unsuccessful score on the parent-teacher chart.

SUBJECT AREA(S)

The subject area is telling time; specifically, how to read the time from a clock to the nearest minute.

INTENDED USERS AND BENEFICIARIES

This package is for any student in the elementary grades who does not know how to tell time to the nearest minute.

RD 020 027

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to tell time to the nearest minute using the "2:45" method.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to place the numbers correctly on a blank clock and to write the correct time of several clocks. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the parent-teacher chart. This requires the parent to indicate whether the student passed or failed the review test. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the parent-teacher chart is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Time Telling Parent Teaching Package* as itemized is $5 (price subject to change). The package is completely reusable except for the items indicated as consumable once the program is implemented.

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program and follow the Parent Keys.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

RD 020 027

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student books: A, B, C, D	1	2.00	Reusable	
Parent manual	1	.50	Reusable	
Parent keys: A, B, C, D	1	1.50	Reusable	
Plastic overlay	1	.50	Reusable	
Marking pencil	1	.15	Reusable	
Parent key for clock face and blue mask	1	.10	Consumable each time program is implemented	
Parent-teacher charts	1	.10		
Thermometer chart	1	.05	Same as above	
Letter to parent	1			
Evaluation form	1			
White clock face	1	.05	Same as above	
Blue clock mask	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

***Time Telling Parent Teaching Package* has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 028

ELEMENTARY ARITHMETIC DIAGNOSTIC TESTING PACKAGE

Computer-assisted package for evaluating the mathematics achievement of students in grades 3-6

The *Elementary Arithmetic Diagnostic Testing Package* is a set of computer programs that can be used to generate pretests, curriculum-embedded tests (CET's), posttests, and exercise pages to accompany individualized instructional programs in mathematics.

The programs are currently capable of providing tests and exercise pages for mathematical operations at a level of difficulty found in 4th- and 5th-grade mathematics curriculums. They are directly keyed to level E of the commercially available individually prescribed instruction (IPI) mathematics program.

The *Elementary Arithmetic Diagnostic Testing Package* was designed for online testing using hard-copy computer terminals. The programs generate test items and provide space for any calculations that need to be made. Students enter their response by typing the response through the terminal keyboard. The computer checks the accuracy of the response, accumulates test scores, and makes decisions concerning mastery status of the student, based on the Wald sequential probability ratio test. At the end of each test, a summary of test results is printed for purposes of prescribing the next objective on which a student should begin work.

SUBJECT AREA(S)

Testing mastery of elementary grade mathematics learning objectives at about the 4th- or 5th-grade level in the areas of numeration/place value, addition/subtraction, multiplication, division, and fractions (corresponding to certain portions of level E in IPI Math) is the subject of this package.

INTENDED USERS AND BENEFICIARIES

This package was designed for students in grades 3 to 6 who are studying objectives similar to those of level E in IPI Math. In addition to using it as a testing device, exercise pages can be generated as an instructional supplement.

GOAL(S) OR PURPOSE(S)

The purpose of these programs is: (1) To measure student achievement, (2) to diagnose student weaknessess, and (3) to provide exercise pages for additional practice.

PATTERNS OF USE

Computer tests exist for pretesting, curriculum-embedded testing (CET), and posttesting. Pretests and posttests cover all the skills in a unit and assist the student and/or teacher in deciding which objectives have been mastered and which should be studied next. CET's are single-skill tests which assess mastery after study of one skill.

ASSESSMENT PROVISIONS

This package of computer programs is a testing device designed for measurement purposes.

TIME REQUIREMENTS

The time required for each test varies according to the skill of the student. In general the student should be able to complete a pretest or posttest in 45 minutes. If the student cannot complete a pretest or posttest within a period, the student may return the second day and continue testing. The student is usually able to complete one CET in 15 minutes.

IMPLEMENTATION PROCEDURES

To use the *Elementary Arithmetic Diagnostic Testing Package*, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. Online testing also requires the use of hard copy terminals. Since some hard-copy terminals may be noisy, a special room may be required to house them.

Training teachers to use this package is minimal with respect to time and difficulty. It usually requires only 2 hours of demonstration to show a teacher how the package and the manual may be used. For a student who has never used a terminal, approximately 30 minutes of demonstration and practice are required for the student to become familiar with the keyboard. No other organizational changes are necessary for implementing the package.

Personnel Required for Product Adoption and Implementation

An expert computer programer is required initially to adapt and to implement this package. Teacher orientation for use of the programs is available from the developer.

ASSURANCES AND CLAIMS

Assurances

The *Elementary Arithmetic Diagnostic Testing Package* has been used in one school with approximately 360 students. Under the guidance of the professional staff, empirical data concerning cognitive and affective learning have been collected and evaluated. Thus far, there has been no negative impact as a result of using this package, either in students' learning processes or in students' interest in learning mathematics. Furthermore, the program contains nothing that could be construed as demonstrating racial, ethnic, or sexual bias.

The package is designed to be transportable and, once initial adaption and orientation have been accomplished, no further implementation assistance should be necessary from the developer.

Claims

Empirical data have shown: (1) When using computer tests, testing time can be reduced substantially without sacrificing the validity of the master decision; and (2) the students involved with computer testing have demonstrated more positive attitudes toward learning mathematics, especially toward computer testing of mathematics. These claims are based on a small-scale study which compared attitudes and performance of students tested with paper-and-pencil methods with students tested using the computer package.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Computer program	1 per computer system	Cost of duplication	Reusable	
Reference manual for computer-assisted testing	1 per teacher	To be announced	Reusable	

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Tse-Chi Hsu, Project Director

AVAILABILITY

Elementary Arithmetic Diagnostic Testing Package **is available from the developer. Copyright is pending. Order from:**

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 029

SWRL LEARNING MASTERY SYSTEM (LMS) FOR ADDISON WESLEY MATHEMATICS

A program which augments the effectiveness of the Addison-Wesley Program for grades 1-6

The *SWRL Learning Mastery System for Addison-Wesley Mathematics* is a set of text-referenced materials and procedures designed to assist teachers in enhancing the effectiveness of the Addison-Wesley Mathematics Program. The systematic approach to the management of instruction provided by the Learning Mastery System (LMS) does not alter the structure and content of the mathematics program; rather, it insures that all program outcomes receive adequate attention. LMS has been developed to accompany grades 1-6 of the Addison-Wesley mathematics program. LMS organizes the mathematics content of each Addison-Wesley mathematics text into sequenced and easily managed units.

LMS increases the effectiveness of the Addison-Wesley Mathematics Program by helping teachers perform three important functions:

1. Identifying explicitly what pupils are to learn. LMS lists the specific learning outcomes that the Addison-Wesley program is designed to promote.

2. Determining when the intended learning has occurred. Periodic assessment enables the teacher to identify pupils who have acquired the learning outcomes and those who need additional instruction.

3. Providing appropriate additional instruction. LMS materials and procedures enable the teacher to furnish pupils with the additional instruction and practice appropriate to their needs.

LMS helps teachers and pupils obtain greater instructional benefits from a program. By identifying outcomes, it insures that no facet of instruction is overlooked. By assessing achievement, it helps the teacher determine which pupils are ready to move ahead in instruction, and it helps identify those pupils who need additional help with specific skills. By providing supplementary exercises, it insures that additional practice is suited to each pupil's specific needs.

SUBJECT AREA(S)

LMS assesses the specific outcomes of the 1973 edition of Addison-Wesley's *Investigating School Mathematics*.

INTENDED USERS AND BENEFICIARIES

The system was developed for all elementary students using Addison-Wesley's *Investigating School Mathematics*.

GOAL(S) OR PURPOSE(S)

LMS helps the teacher: (1) To identify explicitly what the children are to learn from the Addison-Wesley *Investigating School Mathematics* series, (2) to determine when the intended learning has taken place, and (3) to provide appropriate supplementary instruction.

PATTERNS OF USE

Teachers perform the following sequence of activities in using LMS:

Refer to the activities and materials guide. The teacher begins instruction for each LMS unit by referring to the activities and Materials Guide for the unit. Activities and materials guides are convenient reference tools for all LMS unit information.

Conduct unit instruction. Using the Addison-Wesley materials, the teacher conducts instruction, emphasizing outcomes identified on the activities and materials guide.

Assess pupil skills. After completing the Addison-Wesley mathematics instruction for each LMS unit, a criterion exercise is administered to assess pupil achievement of the skills taught in that unit.

Provide supplementary instruction. Based on pupil criterion exercise results, additional instruction is assigned. Review/supplemental activities are provided for use with pupils whose scores indicate a need for review and practice with fundamental concepts taught in the unit. Extension activities are assigned to those pupils whose scores indicate satisfactory attainment of unit concepts and skills. These activities provide advanced work related to the unit outcomes.

ASSESSMENT PROVISIONS

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific mathematics program skills. Practice exercises for review or extension exercises for extended instruction in a skill are assigned on the basis of each child's criterion exercise scores.

The LMS Quality Assurance (QA) system includes the resources to identify and report instructional accomplishments attained during LMS use. This information provides a basis for instructional planning by teachers and administrators. The QA system also provides a means by which pupil proficiency, attained with the instructional program, can be credited in a manner that is understandable by parents and others interested in education.

TIME REQUIREMENTS

The total time required for both end-of-unit assessment and supplementary instruction is generally 1 or 2 class periods, 8 to 10 times during the school year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the LMS efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training that is required, to use the programs effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials for performing administrative functions related to LMS; for example, suggestions for ordering and distributing materials, monitoring the operation of the system during the school year, and integrating the system with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The product materials and procedures have been designed for convenient use by the teacher. There are no requirements for specialized personnel. During tryouts involving over 2,500 classrooms and 88,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in such areas as sexual stereotyping, cultural and racial diversity, dangerous substances, and religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products, and the criteria against which the instructional product has been evaluated during development, provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as "Quality Assurance" (QA) has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and are available for sharing with parents. This information has proved especially useful in furthering parent/school communication and in fostering parental support.

RD 020 029

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set including activities and materials guide, criterion exercises, record sheet, practice exercises, review activities, and extension activities	1 set per 30 students at appropriate grade level	Not determined	Yearly	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The ***SWRL Learning Mastery System (LMS) for Addison-Wesley Mathematics*** **has a 1975 copyright and is currently available from:**

Addison-Wesiey Publishing Co.
Reading, Maine 01867

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 030

SWRL LEARNING MASTERY SYSTEM HOUGHTON MIFFLIN MATHEMATICS

A program which augments the effectiveness of the Houghton Mifflin Mathematics Program for grades 1-6

The *SWRL Learning Mastery System for Houghton Mifflin Mathematics* is a set of text-referenced materials and procedures designed to assist teachers in enhancing the effectiveness of the Houghton Mifflin Mathematics Program. The systematic approach to the management of instruction provided by the learning mastery system (LMS) does not alter the structure and content of the mathematics program; rather, it insures that all program outcomes receive adequate attention. LMS has been developed to accompany grades 1-6 of the Houghton Mifflin Mathematics Program. LMS organizes the mathematics content of each Houghton Mifflin mathematics text into sequenced and easily managed units.

LMS increases the effectiveness of the Houghton Mifflin Mathematics Program by helping teachers perform three important functions:

1. Identifying explicitly what pupils are to learn. LMS lists the specific learning outcomes that the Houghton Mifflin program is designed to promote.

2. Determining when the intended learning has occurred. Periodic assessment enables the teacher to identify pupils who have acquired the learning outcomes and those who need additional instruction.

3. Providing appropriate additional instruction. LMS materials and procedures enable the teacher to furnish pupils with the additional instruction and practice appropriate to their needs.

LMS helps teachers and pupils obtain greater instructional benefits from a program. By identifying outcomes, it insures that no facet of instruction is overlooked. By assessing achievement, it helps the teacher determine which pupils are ready to move ahead in instruction, and it helps identify those pupils who need additional help with specific skills. By providing supplementary exercises, it insures that additional practice is suited to each pupil's specific needs.

SUBJECT AREA(S)

LMS assesses the specific outcomes of Houghton Mifflin's *Modern School Mathematics*. LMS is available to accompany the 1967 and 1972 editions of *Modern School Mathematics*. LMS for the 1967 edition can also be used with the 1970 edition, which was published in California.

INTENDED USERS AND BENEFICIARIES

The system was developed for all elementary students using Houghton Mifflin's *Modern School Mathematics*.

GOAL(S) OR PURPOSE(S)

LMS helps the teacher: (1) To identify explicitly what the children are to learn from the Houghton Mifflin *Modern School Mathematics* series, (2) to determine when the intended learning has taken place, and (3) to provide appropriate supplementary instruction.

PATTERNS OF USE

Teachers perform the following sequence of activities in using LMS:

Refer to the activities and materials guide. The teacher begins instruction for each LMS unit by referring to the activities and materials guide for the unit. Activities and materials guides are convenient reference tools for all LMS unit information.

Conduct unit instruction. Using the Houghton Mifflin materials, the teacher conducts instruction, emphasizing outcomes identified on the activities and materials guide.

Assess pupil skills. After completing the Houghton Mifflin mathematics instruction for each LMS unit, a criterion exercise is administered to assess pupil achievement of the skills taught in that unit.

Provide supplementary instruction. Based on pupil criterion exercise results, additional instruction is assigned. Review/supplemental activities are provided for use with pupils whose scores indicate a need for review and practice with fundamental concepts taught in the unit. Extension activities are assigned to those pupils whose scores indicate satisfactory attainment of unit concepts and skills. These activities provide advanced work related to the unit outcomes.

ASSESSMENT PROVISIONS

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific mathematics program skills. Practice exercises for review or extension exercises for extended instruction in a skill are assigned on the basis of each child's criterion exercise scores.

The LMS Quality Assurance (QA) System includes the resources to identify and report instructional accomplishments attained during LMS use. This information provides a basis for instructional planning by teachers and administrators. The QA system also provides a means by which pupil proficiency, attained with the instructional program, can be credited in a manner that is understandable by parents and others interested in education.

TIME REQUIREMENTS

The total time required for both end-of-unit assessment and supplementary instruction is generally 1 or 2 class periods, 8 to 10 times during the school year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the LMS efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training that is required, to use the programs effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials for performing administrative functions related to LMS; for example, suggestions for ordering and distributing materials, monitoring the operation of the system during the school year, and integrating the system with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The product materials and procedures have been designed for convenient use by the teacher. There are no requirements for specialized personnel. During tryouts involving over 2,500 classrooms and 88,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in such areas as sexual stereotyping, cultural and racial diversity, dangerous substances, and religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products, and the criteria against which the instructional product has been evaluated during development, provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions apart from SWRL a set of procedures referred to as "Quality Assurance" (QA) has been developed. As the tryout monitoring procedures did for the SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and are available for sharing with parents. This information has proved especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set including activites and materials guide, criterion exercises, record sheet, practice exercises, review activities, and extension activities	1 set per 30 students at appropriate grade level	35.00 per set	Yearly	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

SWRL claims common law copyright on these materials. The *SWRL Learning Mastery System: Houghton Mifflin Mathematics* is currently available from:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 031

SWRL PROFICIENCY VERIFICATION SYSTEM: MATH

A testing program to be used in connection with 10 widely used mathematics text series

The *SWRL Proficiency Verification System* (PVS) can be most expeditiously described in terms of the situation in which it will operate. The situation is typical in the schools of the Nation at the present time. An educational agency—a school district most likely, but possibly a State or a subunit within a district—has adopted two or more text series from which education units may "subadopt" as a basis for instruction. The agency wishes to credit the instructional accomplishments attained by students and teachers with these series and to convey such information in forms that are understandable and useful to school personnel and also to parents through the teacher and to the community through district officials. The agency also wishes to obtain information for instructional planning purposes regarding the differences in accomplishments with the different series being used within the agency. However, it is immediately within reach of, if not within, the state of the art of educational research and development to satisfy.

The *SWRL Proficiency Verification System: Mathematics* is initially being developed to operate in connection with all, or a subset of, 10 widely used mathematics text series. PVS operates as follows: Each participating agency indicates the number of students and school location, and instructional placement of students for each series in use. PVS resources provide text-referenced assessment measures for administration by teachers approximately four times a year, depending on instructional pacing. PVS generates reports for teachers, principals, and district officials crediting instructional accomplishments and summarizing instructional planning data.

PVS resources include operating guides, text-referenced proficiency verification booklets for students, and interpretation guides.

SUBJECT AREA(S)

The subject area is mathematics.

INTENDED USERS AND BENEFICIARIES

PVS is being developed for use with all students involved in instruction with the set of instructional products defined by the text series. It is being field tested with a range of different educational situations. PVS provides an operational mechanism for involving parents and community advisory groups as users and beneficiaries of instructional planning information with the professional guidance of educational personnel.

GOAL(S) OR PURPOSE(S)

Agencies participating in PVS receive organized and interpretable information regarding instructional accomplishments. The information is referenced to the specific instructional products that have been procured to provide resources for school personnel to equip students with mathematics proficiency.

PATTERNS OF USE

PVS assessment measures are referenced to text resources. Thus, PVS is adaptive to the instructional pace at the student, teacher, school, and district levels. An important feature of PVS is that the reports yield systematic information on proficiency rate as well as proficiency substance.

ASSESSMENT PROVISIONS

Assessment is the nuclear core of PVS. The assessment, however, does not reference either abstract "criteria" or "people as products." Rather, it references the instructional products that school personnel use as resources to attain mathematics proficiency criteria with individual students.

TIME REQUIREMENTS

PVS augments regular classroom instruction. Typically, during the course of 1 academic year, it requires about 2 hours of student time. Special teacher time for PVS operations is negligible. The greatest segment of professional time is devoted to the use of the PVS reports in instructional planning. This time allocation is at the professional discretion of the report recipients.

IMPLEMENTATION PROCEDURES

A comprehensive, self-contained training system is provided. The training system enables district supervisors to assume all responsibility for training teachers and other school personnel in the use of PVS and to conduct this training within the time conventionally available to school personnel.

Installation system materials facilitate the performance of administrative functions related to PVS, for example, suggestions for conducting briefing sessions for school boards, parents, and community members; monitoring the operation of PVS during the school year; reporting pupil proficiency to parents and others interested in the schools; and conducting between-program comparisons.

ASSURANCES AND CLAIMS

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During development, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema and has served to assure user acceptability and product transportability.

The product does not appear to possess bias or imbalance in such areas as sexual stereotyping, cultural and racial diversity, dangerous substances, and religion.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Starter set including coordinator guide and participating rosters for schools and intraschool units	1 set per participating agency	*	Yearly	
Training/installation set including information booklets, operations guides, filmstrips, and audiotapes	Dependent upon number of participating education units in agency		Reusable	
Classroom set including booklets and operations record forms	1 set per 30 students per instructional series		Yearly	
PVS reports generated following computer analysis of data, with report interpretation guides	Generated for class, school, and district levels at beginning of year, midyear, and end of year		Archival	

*Undetermined at this time.

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL Proficiency Verification System* is copyrighted and will be available November 1975 from:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 032

CURRICULUM DEVELOPMENT IN ELEMENTARY MATHEMATICS: NINE PROGRAMS

Descriptions of nine mathematics programs that grew from the education reform efforts of the 1950's

Curriculum Development in Elementary Mathematics: Nine Programs describes and analyzes nine major mathematics programs that grew from Government-financed educational reform efforts that began in the 1950's. Eight of the reports probe American curriculums developed with funding from the Office of Education, the National Institute of Education, or the National Science Foundation. The ninth looks at mathematics reform in the United Kingdom undertaken by the Nuffield Foundation and the National Schools Council.

The introduction discusses the impact of the new mathematics, the importance of inservice training for teachers, and differing educational philosophies and approaches taken by mathematics curriculum developers. Each report begins with statements of the goals and theoretical foundations of the curriculum and then details its mathematics content, teaching strategy, implementation, history of development, and evaluation results. Summary sections at the beginning of each report provide thumbnail descriptions and basic information about content, style, and availability. The book as a whole provides case studies of the research and development process of curriculum development in mathematics; it is not intended to be a comprehensive directory of mathematics programs.

SUBJECT AREA(S)

The subject area is elementary mathematics curriculums.

INTENDED USERS AND BENEFICIARIES

The book is intended to provide school people who make mathematics curriculum decisions with a framework for judging the appropriateness of mathematics programs for their special needs and contexts. The book is also addressed to those who develop new curriculums.

GOAL(S) OR PURPOSE(S)

The book is not intended to give school superintendents, mathematics curriculum specialists, or the classroom teacher a Government-certified, guaranteed, fail-proof elementary mathematics program. It is intended to help school people in the selection of programs that will meet their own educational goals for children and to fit their own assessment of their children's needs in mathematics, their district's resources, and their beliefs about how children and teachers learn.

PATTERNS OF USE

This book serves as a background and reference document for school people involved in selecting elementary mathematics curriculums.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Kathleen Devaney
Lorraine Thorn

AVAILABILITY

The product is available for $7.95 from the developer:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 033

GOING METRIC: AN ANALYSIS OF EXPERIENCES IN FIVE NATIONS AND THEIR IMPLICATIONS FOR U.S. EDUCATIONAL PLANNING

A report to help planners and policymakers benefit from the metrication experiences of other countries

The United States is approaching total commitment to "going metric." This pervasive change will present substantial education and training problems. We are in a unique position to make effective and timely use of the metric conversion experiences now occurring in five other countries: The United Kingdom, Australia, South Africa, New Zealand, and Canada.

In the final report for this project, the approach to metrication in each of the five target countries is documented. Techniques of teacher and student training in the metric system and major areas of instructional materials development activity are discussed. Problem areas in metric education are identified. These include resistance to change, inadequate materials, equipment conversion, teacher training, vocational training, communication and coordination, and policy and schedule difficulties. In addition, special problems in the instruction and use of the metric system and the coping strategies used overseas are described. How respondents in each country would change their approach to metrication, if they had the opportunity, is also summarized. Finally, nine major recommendations for how these experiences of other countries can be utilized by the United States are presented.

SUBJECT AREA(S)

Mathematics and Science

General background information and guidelines for policymakers and educators in planning metric education programs and strategies are discussed. Topics include: Early history of metric conversion, recent U.S. experience, and a discussion of the impact of metric conversion on educational practices; an overview of metrication in the United Kingdom, Australia, South Africa, New Zealand, and Canada; findings, presented in terms of overseas experience in teacher training, instructional strategies, and major areas of instructional materials development in the metric system; and problem areas in the planning, design and implementation of metric education programs, along with solutions identified overseas and implications for United States educators.

INTENDED USERS AND BENEFICIARIES

The primary intended users are education policymakers, planners, and program designers at the Federal, State, and local school district levels. School principals and teachers in all subject areas will be assisted in their metric curriculum development activities, as well as individuals concerned with adult education and vocational/technical education (e.g., home economics, agriculture, and industrial training). Ultimately, the students and the adult community will benefit from a well-designed system of metric education in all areas of society.

GOAL(S) OR PURPOSE(S)

The major goals are to assist individuals in their efforts: (1) To develop comprehensive policies which will minimize the human problems of metrication, (2) to plan effective metric education programs for both adults and children, (3) to learn from the experiences of other English-speaking countries currently undergoing metrication and (4) to be aware of the potential contribution that educators and school systems can make to a national metrication program.

PATTERNS OF USE

There are no restrictions on usage. Portions of the report, as well as the bibliography, can appropriately be included in background courses in metric awareness for teachers and administrators.

ASSESSMENT PROVISIONS

No provisions are made for evaluation of learning achievement.

TIME REQUIREMENTS

Time requirements are dependent on the individual's reading 125 pages of text.

IMPLEMENTATION PROCEDURES

No special procedures are required.

ASSURANCES AND CLAIMS

No indications have been received to indicate that the product induces harm or that it perpetuates racial, religious, or any other social biases. Based on informal feedback from users, the product can stand alone and does not require intervention by the developer.

RD 020 033

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Final report	1 per user	6.40	Consumable	

DEVELOPER/AUTHOR:

American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

Albert B. Chalupsky, Project Director
Jack J. Crawford
E. M. Carr

AVAILABILITY

The product is not copyrighted. It was developed in 1974 and is currently available from:

Metric Studies Center
American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 034

METRIC IN-SERVICE TEACHER TRAINING: LEARNING FROM THE ENGLISH AND AUSTRALIAN EXPERIENCE

A report which offers recommendations to assist in the planning of metric teacher-training programs

To gather information for assisting teachers and administrators charged with the responsibility for inservice training, AIR undertook a study of metric inservice training experiences in England and Australia.

In the final report, various approaches to metric inservice training in England and Australia are described. Organization, planning, training strategies, and teaching materials are reviewed. Specific problems impacting on teacher training in England and Australia at the elementary and secondary levels are identified. Proposed solutions are discussed. A total of 13 recommendations is offered to teachers and administrators to assist in the planning and design of metric inservice teacher training programs in the United States.

SUBJECT AREA(S)

Teacher training concerns in England and Australia and their implications for inservice teacher training in the United States. Specific topics include: (1) Review of data-collection procedures through the use of an interview guide and the use of an overseas information network; (2) characteristics of metric teacher training, teacher training problems, and general views of respondents in England; (3) characteristics of metric teacher training, teacher training problems, and summary of teacher training efforts in Australia; and (4) implications for U.S. metric teacher training with specific recommendations for policymakers, administrators, and teachers involved in planning metric education.

INTENDED USERS AND BENEFICIARIES

The report is intended for individuals in Federal, State, and local educational agencies concerned with the planning and design of teacher inservice training programs. Ultimately, the students should benefit from better designed inservice training programs.

GOAL(S) OR PURPOSE(S)

The goals of this product are: To assist in the overall planning and design of teacher inservice programs so that the teachers benefit from the experiences of two countries which have accomplished most of their metric inservice training of elementary and secondary schoolteachers.

PATTERNS OF USE

There are no restrictions of product use; only the reading of the final report is required.

ASSESSMENT PROVISIONS

No assessment provisions are required.

TIME REQUIREMENTS

The only time required is that for reading the project final report.

IMPLEMENTATION PROCEDURES

No special procedures are required.

ASSURANCES AND CLAIMS

This product has not been distributed as yet, but review of the draft by the NIE project officer and four independent reviewers has not indicated any likelihood of harm or any evidence of social bias.

RD 020 034

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Metric Inservice Teacher Training: Learning from the English and Australian Experience, Final Report	1 copy	No charge while project supply available; later, can be obtained from producers or ERIC at cost of printing and distribution		

DEVELOPER/AUTHOR:

American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

Albert B. Chalupsky, Project Director
Jack J. Crawford
Edwin M. Carr
Patrick McDonnell

AVAILABILITY

The developer has not applied for a copyright. As of April 1975, the product is available from the developer:

Metric Studies Center
American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 035

MINICOURSE 5: INDIVIDUALIZING INSTRUCTION IN MATHEMATICS

A program to help 4th- to 6th-grade teachers improve their skills in tutoring mathematics students

Individualizing Instruction in Mathematics is one of a series of minicourses developed by the Far West Laboratory for Educational Research and Development. The minicourses are based on the Stanford microteaching program. This is a self-contained inservice or preservice program to help teachers improve their skills in tutoring math students by improving one teaching skill at a time. In the typical self-instructional sequence, a teacher reviews an instructional and model lesson film, then plans and conducts two brief 10-20-minute tutoring sessions which are recorded. The teacher then plays back the recording and evaluates use of the skills. One or two days later, the teacher conducts two more brief tutoring sessions, and after evaluating recordings of these sessions to assure mastery of the skills, goes on to the next skill.

SUBJECT AREA(S)

Inservice or preservice teacher-training program to learn to conduct effective tutoring sessions with elementary school mathematics students is the subject area.

INTENDED USERS AND BENEFICIARIES

The minicourse was designed for teachers in grades 4-6, but has proven effective for teachers in grades 1-7. The skills would be of use to teachers of individualized and traditional mathematics programs.

GOAL(S) OR PURPOSE(S)

Trainees will learn to conduct effective tutoring sessions by using skills in math tutoring: Verbal praise, asking diagnostic questions, demonstrating mathematics skills and concepts, using evaluation examples to check student learning, and assigning practice examples to consolidate student learning.

PATTERNS OF USE

Minicourse 5 is an autoinstructional package. It consists of a teacher's handbook, a coordinator's handbook, and a package of nine reels of 16mm color film with instructional and model lessons. The handbook and film are interdependent, and lessons should be taken sequentially.

ASSESSMENT PROVISIONS

Minicourse 5 is autoinstructional. Teachers evaluate their own performance, as there are no provisions for evaluation by anyone else.

TIME REQUIREMENTS

Approximately 1 hour per day for 13 days is required.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model films to participating teachers. A room with the video taping equipment and seating for the teacher and four to five students should be set up and made available for microteaching.

The coordinator schedules participating teachers to use the microteaching room and should arrange for someone to relieve the teachers from regular classroom duties during microteaching.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide a 20-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

The minicourses are designed to be used with video tape equipment so that teachers can see themselves perform. However, this minicourse can use a regular audiotape recorder instead of the video taping equipment. Through field testing, the Far West Laboratory discovered that for this particular course, the use of tape recordings proved as effective as video tapes. Because of this, the program may be used by districts for whom the purchase of a video taping system would be a financial burden.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Minicourse 5 was field tested 3 times with a total of 346 teachers in grades 3-6. The course has also been used by a large school district in California. Conversations with independent teachers who have taken *Minicourse 5* indicates that the materials are effective as presented and are not harmful either to teachers or pupils.

Teachers made major gains in use of verbal praise, diagnostic questions, and demonstration techniques such as expanded notation, number line, estimation, and drawing pictures to illustrate problems and improved in assigning practice examples to reinforce learning. These changes in teacher behavior were consistent under various methods of using the course, and the behaviors have proved replicable.

The preliminary form of the course was developed after careful search of the literature on tutoring. Intensive classroom observations revealed areas needing skill development. After testing the preliminary form of the course with 7 teachers, revisions were made and the main field test was conducted with 49 teachers in 3 predominantly middle-class school districts. Results of effectiveness in learning mathematics tutoring skills are based upon results of this main field test. After further course revisions, the minicourse was put through an operational field test with 290 teachers. The operational field test is conducted without participation by the developer to insure that the course can be used independently, thus assuring its transportability and replicability.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,600.00*	Reusable	
Teacher's handbook	1 per teacher	3.00	Not reusable	
Coordinator's handbook	1	4.00	Reusable	
20-minute video tape	1 per teacher	22.00	Annually**	3M, Sony, Memorex, Ampex, Karex

*Films may be purchased or rented for 6 weeks for $200.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about five times. However, each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Meredith D. Gall, Author
Barbara Dunning, Author
John Galassi, Author

AVAILABILITY

Minicourse 5: Individualizing Instruction in Mathematics was published by Macmillan Educational Services, Inc., Beverly Hills, California, in 1971. Copyright is claimed by Far West Laboratory until December 31, 1975.

Requests for preview materials and information regarding purchase or rental should be addressed to the distributor:

The Macmillan Company
Front and Brown Sts.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 036

ELEMENTARY SCIENCE INFORMATION UNIT

A review of six science curriculums to aid school personnel in deciding which of the programs suits their own situation

The *Elementary Science Information Unit* reviews and compares six science curriculums in such a way as to aid school personnel in deciding which of the programs best suits their own situation. (*Conceptually Oriented Program in Elementary Science* (COPES), *Elementary Science Study* (ESS), *Inquiry Development Program* (DP), *Minnesota Mathematics and Science Teaching Project* (MINNEMAST), *Science Curriculum Improvement Study* (SCIS), and *Science Process Approach* (SPA) are all described in parallel fashion. An introductory booklet outlines procedures to be followed when a group is being conducted step-by-step through the review process. A review booklet gives readers a brief introduction to all six programs. Each program is treated to a color filmstrip-audiotape review after being compared and contrasted via an introductory filmstrip-audiotape presentation. Finally, each program is described in detail in 30- to 40-page booklets.

SUBJECT AREA(S)

The subject area is elementary science curriculums.

INTENDED USERS AND BENEFICIARIES

The intended users are administrators and teachers in elementary schools, preservice trainees, science consultants, and instructors in curriculum methods.

GOAL(S) OR PURPOSE(S)

The purposes of this information unit are to assist school decisionmakers in gaining information about, and selecting between, some of the major Federally funded elementary science curriculums and to provide a multimedia model to help train educators in the process of curriculum decisionmaking.

PATTERNS OF USE

The information unit is planned for use by groups responsible for science curriculum decisions at the school district level. The group views an introductory filmstrip with cassette tape, then surveys the various curriculums in depth through filmstrips and detailed program reports. In preservice training programs, an instructor would make student assignments; but in a school district, leadership in the use of the unit might be assigned by the district office.

ASSESSMENT PROVISIONS

No assessment techniques are provided in the unit. Choice of curriculums will depend on various factors; e.g., district needs, interests, demographic characteristics. Presumably, users assess the options in terms of predeterminal local criteria for a suitable science program.

TIME REQUIREMENTS

The seven filmstrips and eight booklets (plus supplement) could conceivably be reviewed, read, and discussed in 1 day. However, use over a period of several weeks is recommended.

IMPLEMENTATION PROCEDURES

A filmstrip projector and reel-to-reel audiotape recorder are required.

ASSURANCES AND CLAIMS

Assurances

During development and field testing and in the several years that the product has been distributed and used nationally, no difficulties have been revealed.

Claims

The content of the material is now somewhat out of date, since development work ended in 1970 and the only supplement was released in 1971. However, the product as a decisionmaking model has been very thoroughly validated, as reported in *An Educational Development Case Study*. To obtain the study, No. ED 043 515, $0.76 (microfiche), $3.32 (paper), add $0.26 (postage), order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Boxed multimedia: *Elementary Science Information Unit*	1 per school district or college	75.00	Reusable	
Additional copies of 8 booklets	Optional	1.00 (Payment must accompany order)	Reusable	Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, Calif. 94103

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Larry Hutchins, Project Director

AVAILABILITY

The *Elementary Science Information Unit* was copyrighted in 1971, and copyright is claimed until 1975. It is currently available from:

Universal Research Systems, Inc.
363 South Taafee St.
Sunnyvale, Calif. 94086

INFORMATION CURRENT AS OF MARCH 1975 ■

INDIVIDUALIZED SCIENCE (IS)

A basal science program closely integrated with an individualized learning management system

Individualized Science (IS) is a basal science program comprising 17 mainstream units and 6 alternative pathways units. The mainstream units are organized into 6 levels (designated A-F). Each level is appropriate for use at several different school grades. For example, level A materials designed for the "average" 1st-grade child may be used with equal success by a more advanced kindergarten child or a less advanced 2d-grade child.

IS is a science curriculum closely integrated with an individualized learning management system. The program provides the child with science experiences designed to develop, by means of the child's active involvement, a comprehensive view of the scientific enterprise. Instruction in the program imparts to the child knowledge about science, its methodologies, and its influence on society and individuals. Science instruction is individualized in order that each child can derive maximum benefit from personal experiences in science.

Each unit is composed of many (30-50) different instructional segments, some designed for self-instruction and others for children to learn together. The instructional strategy used in an instructional segment depends on the kind of learning the segment is designed to engender. Individual Lessons (IL's) are used primarily to impart information to the child. Miniature Explorations (MinEx's) are laboratory exercises to give children opportunities to engage in discovery learning, to practice using scientific apparatus, and to be exposed to models of scientific exploration. MinEx's and IL's are examples of the 10 or so different kinds of learning resources for both individual and small-group study that are used in each level of IS. The program's individualized learning management system places a sizable part of the responsibility for managing and evaluating learning on the child.

A typical day in IS begins as a child consults the planning booklet to find out which activities to do. If an individual lesson is selected, the child obtains the appropriate lesson booklet, answer booklet, and manipulative materials. (Each lesson booklet has an associated read-along tape which the child can elect to use.) In doing the lesson, the child reads (or listens), carries out investigations with concrete objects, records observations, and writes answers to questions. A second child may elect to do a MinEx together with another child. In doing the MinEx, the children will have considerably less direction and will do more investigating and manipulating of equipment than the child doing an individual lesson.

At the same time, other children in the room can be found working with various other learning resources that the program provides. Some will be engaged in instructional games and other group activities. Others may be using a filmstrip or doing a project activity. Another child is having a conference with the teacher. The room is orderly, but there is a buzz of excitement as all the children pursue their science learning.

SUBJECT AREA(S)

The subject area is general science, with emphases on: (1) Concepts from human physiology, (2) physical and biological systems, (3) interactions of science and society, and (4) processes of scientific inquiry.

Learning-to-learn skills: Planning and self-direction of learning and evaluation of one's learning are the methods used in the package.

INTENDED USERS AND BENEFICIARIES

Students of all abilities in grades K-6 are the intended users.

The six levels, A-F, of the program have been designed to correspond with the abilities of the "average" child in grades 1-6. However, the match between IS levels and school grades is only approximate since this is an individualized program. The students progress at their own rate and work with materials from an IS level appropriate to individual development. Field test data indicate that advanced kindergarten children can successfully use level A materials and that materials from IS levels E and F are suitable for students in grades 7 and 8.

GOAL(S) OR PURPOSE(S)

The program is designed to enable children: (1) To acquire a foundation of scientific literacy; (2) to be skillful in using the processes of scientific inquiry and to be able to carry out inquiries; (3) to display positive attitudes towards their study of science and scientific inquiry and to display an informed attitude toward the scientific enterprise; (4) to view the learning process as primarily self-directed and self-initiated; and (5) to play a major role in evaluating the quality, extent, and rapidity of their learning.

Each of these five major goals of IS has several components, which are specified as student terminal behaviors. In addition, the components under each goal are further specified by student competencies for each IS level and behavioral objectives for each unit.

School-wide use. IS is a complete sequential science program consisting of 3 introductory units, 17 mainstream units, and 6 alternative pathways units. A child can successfully enter the program or a school can implement the program at any grade level through the use of the introductory units. Mainstream units comprise the basic science core which each student is expected to study. alternative pathways units are optional explorations which are available to the student.

The three introductory units are the mechanisms by which the child learns the individualized learning management procedures and prerequisite academic skills or science content necessary for successful participation in IS mainstream and alternative pathways units. Thus, the start unit is designed to introduce the child to management procedures used in the Simpson unit (the first unit of level A). The unit also assesses the child's competence in certain academic skills (recognizing and writing numbers, for example) which are essential to successful participation in the Simpson unit.

The launch unit teaches all those management procedures taught in the start and level A and B units and certain essential science content taught in units of levels A and B. Hence, the launch unit provides a mechanism by which a 3d- or 4th-grade student can enter the IS program without first doing start, level A, and level B.

The link unit is the mechanism by which students in grades 5 or 6 gain entry to level E of the program. It teaches the management procedures and certain essential science content taught in all the units of IS that precede level E.

The existence of introductory units means that IS can be implemented in an elementary school in various ways.

Classroom use. Several levels of IS can be used simultaneously in an elementary school science classroom or in a self-contained classroom. Levels are sequential and cumulative. Some units within levels must be taken in a specific sequence; but for others, the students may select the order in which they will do the units. Within a unit, there are certain learning resources which each child must do. Individual lessons are generally required and generally must be done sequentially, but the other kinds of learning resources can be used in any order.

ASSESSMENT PROVISIONS

Formal and informal mechanisms for the assessment of all five goals of IS are an integral part of the curriculum materials. Provisions for assessment of the inquiry, self-direction, coevaluation, and affective goals are largely informal. For each of these goals, competencies that the child should display upon completion of an IS level are defined. The teacher or other evaluator can use the competency statements as a checklist to assess the child's progress toward attaining each of these goals.

More formal assessment procedures are defined for the scientific literacy goal. Each mainstream unit has a pretest which is used to assess the knowledge that the child possesses about the unit's science content. Results of the pretest are used to help the children plan their work in the unit. Most of the IS learning resources require that the children make written responses to questions. Answers to these questions are available to the children so that they can check their progress through the learning resource. Individual lessons have semiformal checkups, usually at the end, which the children use to determine whether they have satisfactorily learned the content of the individual lesson.

Each mainstream unit includes a posttest. Results of the posttest are used to determine whether a child has satisfactorily completed a unit, or to plan further work in the unit if the results are not satisfactory. Posttest scores are used by some teachers as a basis for assigning grades.

TIME REQUIREMENTS

The amount of time an individual child takes to complete a unit varies greatly, as does the amount of time individual schools set aside for science instruction at various grades. Thus, exact specification of time requirements is impossible. On the average, however, one IS level should provide adequate science instruction for 1 year in the school grade level for which it is designed.

IMPLEMENTATION PROCEDURES

Before implementing IS, classroom teachers should complete "Preparation for IS." This is a self-instructional packaged program designed to teach that information which is necessary for successful implementation of IS. The product is listed in the "Materials and Equipment" section.

A large number of students can use the same set of IS materials when science time is carefully scheduled. The sets of IS materials are made available for student use either by setting them up permanently in a science room or in some other central area, or by moving them on a cart from one self-contained classroom to another. (A specially designed cart for IS materials is available as an optional purchase.) In the latter arrangement student paperwork for each IS unit remains in the individual classrooms. The figure of 450 students using the same set of IS materials is based on 15 classes of 30 students, each class scheduled for science 2 times per week. The figure of 300 students using the same set of IS materials is based on 10 classes of 30 students, each class scheduled for science 3 times per week.

Summary Cost Information

School-wide installation of levels A through D complete, level E mainstream units, start, and launch units for 630 students would cost $5,559.95, or an average cost per student of $8.80.

The average continuing cost per individual student with replacement of all student paperwork would be $1.97. The average continuing cost per individual student with use of plastic sleeves to reuse paperwork would be $1.40.

Installation purchases of particular levels of the IS program may also be made. In addition, starter packages are available for initial installation of IS at modest cost.

Personnel Required for Product Adoption and Implementation

The regularly certified classroom teacher can teach IS. It is recommended that all teachers using the program complete the "Preparation for IS" unit. No special support services are required.

ASSURANCES AND CLAIMS

Assurances

During the course of formative evaluation, several thousand elementary schoolchildren worked with IS materials. Currently, the commercial version of the program is being used in over 250 schools. On the basis of these experiences, the following assurances of harmlessness, social fairness, and transportability are made.

There is no evidence that participation in IS exposes the child to any psychological or sociological harm or undue physical harm. It should be noted that IS is a science program that relies heavily on direct student involvement with objects of the physical world. Such mishaps as insect stings and minor cuts, burns, and bruises have occasionally occurred. None have been serious. Curriculum materials contain adequate precautions and directions for the safe use of all scientific equipment, physical objects, and chemical substances.

In the original writing of the curriculum materials and in their revisions, constant attention was given to eliminating any phrasing and illustrations that might perpetuate sexism, racism, or other biases. The commercial version of the IS materials reflects the positive results of the attention given to this problem. (Also see Claims section.)

Claims of Careful Product Development, Effectiveness, and Social Fairness

Each IS unit undergoes extensive formative evaluation. The science content is validated by a member of a panel of university scientists. Classroom testing of the materials takes place in two steps. A small-scale classroom test of prototype materials is carried out by the developers. Then a more comprehensive field test of materials is carried out by Research for Better Schools (RBS). After each of these classroom tests, revisions are made. (Further discussion of this process can be found in Audrey B. Champagne's and Leo E. Klopfer's "Formative Evaluation in Science Curriculum Development," *Journal of Research in Science Teaching*, 1974, 11, 185-203.) For the IS program as a whole, the formative evaluation includes reviews of its goals, objectives, organization, and instructional strategies by science educators, elementary schoolteachers, psychologists, and instructional technologists, none of whom are directly associated with the program's development.

The results of formative evaluation during the development of IS and the experiences of users of the commercial version justify the following claims. For each claim, the nature of the supporting evidence is indicated in parentheses.

1. The science content is accurate. (Expert reviews of science content.)

2. Children are capable of performing the learning tasks required of them when they work in an IS unit designed for their level of development. (Field test reports from RBS; observations in prototype tests.)

3. IS operates smoothly in various kinds of instructional settings such as science classrooms, self-contained classrooms, and open-space schools. (Field test reports from RBS; commercial purchasers' feedback.)

4. IS operates smoothly under the direction of teachers with various teaching styles. (Field test reports from RBS; commercial version purchasers' feedback.)

5. IS improves children's skills in self-management of their learning activities. (Commercial version purchasers' feedback.)

6. Most children enjoy learning science with IS more than they enjoyed learning science in the "traditional" format of textbook reading plus teacher demonstrations. (Commercial version purchasers' feedback; direct reports from children.)

7. IS printed materials give fair treatment to the two sexes and are free from obvious or subtle racial bias. (Report on sex and race bias study by RBS.)

8. The logical and pedagogical structures of IS are internally consistent, and they are consistent with the program's five major goals. (Curriculum analysis report.)

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Multiple classroom or science room set including same items as level A	1 set for 300 students maximum	Not determined		
Student paperwork including same items as level A	1 set per 30 students	Not determined		
Alternative pathways units (1 unit to be selected for level D; 1 unit to be selected for level E; 2 units to be selected for level F. Available units: Comstock, Linnaeus, Archimedes, Volta, Copernicus, Lyell)				
Multiple classroom or science room set including student exploration booklets, booklet of readings, activity cards, audiotapes, filmstrip, manipulatives, and teacher's manual	1 set for 300 students maximum	Not determined		
Student paperwork for each unit	1 set per 30 students	Not determined		
Basic equipment and materials				
Cassette tape player with headphones	8 per set of IS levels A and B; 2 per set of IS level C, D, E, or F	40.95	Every 4 years	Distributor or any A-V supplier
35mm filmstrip viewer or projector	1 per set of any IS level	22.00-55.00	Every 5 years	Any A-V supplier
Hotplate	1 per set of any IS level	18.00	Every 5 years	
Student folder with pockets	1 per student	.20	Yearly	
Teacher "Preparation for IS" unit with print materials, audiotapes, filmstrips, and coordinators' manual	1 per school	125.00		
Optional equipment				
Cart (for storing and moving materials)	1 for IS levels A and B; 1 each for IS levels C-F	110.00		
Aquarium	1 per science room or classroom	25.83		Distributor or other supplier
Plastic sleeves and pens (for reuse of student paperwork)	30 per IS level	29.85 per 30 students	Every 4 years	

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Audrey B. Champagne, Project Codirector
Leopold E. Klopfer, Project Codirector

AVAILABILITY

Start and launch units, levels A through D, and the Joule unit of level E have been published (copyright 1972-74). Beaumont and Voit units of level E are scheduled for release in July 1975.

Field testing of four alternative pathways units has been completed, and revisions for commercial publication have been made. The link unit, level F mainstream units, and two alternative pathways units are being field tested.

Six alternative pathways units, link unit, and level F mainstream units will be published in 1976 and 1977.

Two sound filmstrips showing the IS program in actual classroom use are available: "Typical Day in Individualized Science (Grades K-2)" and "Typical Day in Individualized Science (Grades 3-6)."

A list of demonstration schools around the Nation that are teaching IS and are open to visitation is also available.

Sample materials including kits, printed materials, and filmstrips are available at no charge on loan. Teacher's manuals are also available on request from the distributor:

Imperial International Learning Corporation
Box 548, Route 45 South
Kankakee, Ill. 60901

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 038

INQUIRY ROLE APPROACH (ADAPTED FOR USE WITH SILVER-BURDETT'S HIGH SCHOOL PROGRAM "BIOLOGY")

A complete instructional system for teaching secondary-level biology

Inquiry Role Approach (IRA) is an instructional system for teaching secondary biology which includes teacher-training materials, a teacher's manual with instructions for day-to-day classroom activities, and student materials.

While the goals of IRA include the learning of biology content—factual information, concepts and principles of biology—the goals also emphasize inquiry-skill development, social interaction skills, and attitude development necessary for good inquiry. The IRA method is based on the premise that biology content understanding, inquiry skills, social skills, and attitudes are interdependent and can be achieved best in a program that integrates them.

A combination of individual, small-group, and whole-class activities is used to expedite learning of important skills and concepts. Major emphasis is given to learning and using four roles of responsibility by members of the four-pupil small groups. These responsibilities complement one another and are periodically reassigned as pupils master them.

The product moves pupils through three steps or "themes" of activity, each one culminating in a several-week inquiry project. These projects, or laboratory explorations in biology, are successively less structured and open-ended to serve as a vehicle for demonstration of the gradually developing inquiry skills and attitudes of pupils. The structure of and dependence on teams gives way by "theme III" to freedom to work individually or select teammates. This developing competence is formatively assessed through the year by individuals, teams, the class, and the teacher. All data are shared and procedures are established to put the data to use by indicating specific areas needing remediation. Instruments for measuring content, inquiry skill, social skill, and attitude are part of the product.

Development of the role of the teacher as manager and facilitator is carefully spelled out in the teacher's manual.

SUBJECT AREA(S)

The current adapatation is to the published text mentioned above. McREL retains the rights to adapt the product to texts of other publishers, and in other subject areas. IRA's intrinsic subject emphasis is in the development of measurable skills of scientific inquiry and productive interpersonal relations, as well as attitudes which are positively related to these areas. The pupils are trained to function and assess their progress relatively independent of the teacher, beginning with the establishment of firmly structured learning and leading to independent problem solving. A subject area of emphasis is, therefore, learning how to learn.

INTENDED USERS AND BENEFICIARIES

Classes of high school biology students with average to above average previous scholastic achievement and their teachers. The reading level is 8th grade.

GOAL(S) OR PURPOSE(S)

Goals of the IRA are: (1) To be able to apply inquiry skills in attempting to resolve relatively unstructured problems, (2) to develop attitudes which complement the development of inquiry skills, (3) to be able to apply social skills to facilitate interacting with one or more pupils in discussions keyed to problem solving, and (4) to be able to apply biologic subject matter (content) in problem solving situations.

PATTERNS OF USE

Activities are sequenced within each "theme" to facilitate logical accumulation of knowledge and skills and to reflect the consensus of field-test teachers whose feedback resulted in rearrangements, deletions, and additions. Wholesale rearrangement of activities would confuse teachers and students. The sequence of themes is also hierarchical, leading from high to low structure of learning activities.

IRA, when used with the text *Biology* and normally available biology equipment and supplies, is the complete high school general biology course.

ASSESSMENT PROVISIONS

Tested items and instruments to measure fulfillment of IRA's objectives and their derivatives are included for use at the activity, theme, and pretest-posttest levels. Special attention was given by the developers to provide instrumentation needed to assess, particularly, the inquiry skill, social skill, and attitude dimensions of IRA. Explicit guidelines for teacher and student administration, scoring, and data interpretation of instruments are included in the product.

TIME REQUIREMENTS

IRA is normally implemented and assessed over a 2-semester year of daily biology classes. Many teachers use the two semesters, to implement only themes I and II which falls short of independent inquiry. These teachers have offered theme III as an advanced biology course the next year. The speed of pupil movement through the themes is largely dependent on teacher willingness to allow pupils to progress at their own pace.

IMPLEMENTATION PROCEDURES

Special services—During field testing, IRA teachers were trained and coordinated in a given district by a fellow teacher who received prior special training from McREL staff members. This procedure, operated by intermediate agents in addition to the developer would facilitate proper implementation in the critical "first year" in a given district.

The current availability of special services is limited to very occasional demonstrations by the publisher at professional meetings. Establishment of several dissemination centers (intermediate agencies) has been proposed by the developer who would coordinate the process and cooperate with the publisher.

Maintenance of users through provision of installation tips newsletters, product updating, and onsite assistance in situations of unusual problems would be desirable in addition to preinstallation workshops and orientations.

MATERIALS AND EQUIPMENT

The required materials consist of the IRA package (at $32.00 per teacher). They can be used for all the teachers' biology students over a 1-year period. Textbooks and classroom supplies and equipment are no different from those required of a teacher using the text *Biology* or other popular texts without IRA; e.g., the IRA package is required for a biology teacher who is already set up to teach biology and who plans to use the Silver-Burdett text *Biology* as the main text for the year.

Additional or special services for implementation would depend on the availability of funds to enable the developer to cooperate and share with the publisher to provide such support or approximate the sort of teacher training which preceded field testing of the product and is desirable in the initial installation of any new curriculum and instruction program.

ASSURANCES AND CLAIMS

During the 6 years that the product was under development, and during formative and summative evaluation, no evidence was uncovered as to negative effects on users. Classes of students heterogeneously mixed with respect to sex, race, academic ability, and socioeconomic standing, as well as classes characterized by homogeneity of one or more of these factors participated in tests of the product. The final field test of the product showed that students of all DAT quartile groups could show improvement in the product's focus skills and attitudes. However, the developers recommend that its use be restricted to classes characterized by previous average to above-average academic performance—this is primarily a function of reading level (8th grade) which could restrict progress of very slow readers.

Assurances of Harmlessness

There is no evidence of any harmful incidents which have been reported during tests of the product. Such incidents would have been revealed in anecdotal reports from field-test teachers. These reports were regularly collected during field testing.

Assurances of Social Fairness

The materials show no bias either in favor or against a particular social, sexual, racial, religious, or other group. The developers have taken special care to avoid any bias.

Assurances of Replicability or Transportability

The developer assures that the IRA product adaptation to Silver-Burdett's text *Biology* is based on the IRA materials used during final field test in the school year 1972-73. Except as revised, the activities and instruments contained in the product should enable replicability. While the IRA product itself is published and transportable, implementation success may vary according to the amount of orientation or workshop facilitation made available to teachers. It is the developer's position that the product's self-contained implementation guidelines are explicit; however, since field testing included orientation workshop training, the developer recommends such activity to increase the probability of implementation success.

Claim of Effectiveness

The product is effective in developing inquiry skill and related attitudes. This claim has been supported throughout the formative and summative evaluation of the product and was recently documented in:

a. *Inquiry Role Approach Field Test Report* (1972-73), L. Seymour et al., McREL, August 1973.

b. "A Successful Inquiry Methodology," L. Seymour et al., *The American Biology Teacher*, vol. 36, No. 6, September 1974 (based on report a).

c. "Social Skills and Attitudes Acquisition by Secondary Biology Students" and "Inquiry Role Approach Student's Acquisition of Inquiry Skills and Knowledge of Biology"—two papers presented by the developers at the National Association for Research in Science Teaching Convention, April 1974, Chicago, Ill.

Claims of Careful Product Development

Both implementer and learner input and feedback were used in initial product development and for en route and final revisions. Sound principles of behavioral objective planning, implementing, and evaluating were incorporated into the product; and psychologists and social psychologists served as consultants in development of the group discussions/role-taking areas of IRA. Content accuracy and instructional approach were guided by input from McREL to non-McREL biologists and science educators, including a committee composed of McREL and biological science curriculum study staff that produced an extensively disseminated and used document of inquiry objectives and attitudes. *Inquiry Objectives in the Teaching of Biology*, a joint publication of Biological Science Curriculum Study and Mid-continent Regional Educational Laboratory, served as the primary set of constructs upon which IRA developers based inquiry-skill activities in the product.

DEVELOPER/AUTHOR:

Mid-continent Regional Educational Laboratory
7302 Pennsylvania Ave.
Kansas City, Mo. 64114

Richard M. Bingman, Program Development Specialist
Paul G. Koutnik, Program Coordinator
Lowell A. Seymour, Research and Evaluation Specialist
Lawrence F. Padberg, Program Development Specialist
Kenneth J. Bingman, Biology Teacher

AVAILABILITY

The "Paper and Pencil" parts of the IRA (teacher's manual and student materials) are available from the publisher, Silver-Burdett, Morristown, N.J.

Trainer of trainer (intermediate agent) materials and supplementary audiotapes and video tapes have not yet been published.

Development of trainer of trainer (intermediate agent) materials and supplementary audiotapes and video tapes will be completed dependent on availability of funds.

The IRA product is available from:
Silver-Burdett Co.
A Division of General Learning Corp.
250 James St.
Morristown, N.J. 07960

The film, "Learning Through Inquiry: The Search for Mount Everest," showing unrehearsed IRA classroom episodes filmed in 1971 may be rented from the producers:
I/D/E/A
P.O. Box 446
Melbourne, Fla. 32901

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 020 039

"MEN AND IDEAS" FILMSTRIPS SERIES

Filmstrips which explore some of the interactions between science and society, as well as the differences among scientists as individuals

The human and social aspects of science are too infrequently considered in science instructional materials, despite the generally acknowledged importance of young people's need for better understanding of science and its impact on everyone's life. The "Men and Ideas" filmstrips series provides opportunities for students to learn about the lives and work of people who have made significant contributions to the physical and biological sciences. The filmstrips explore some of the interactions between science and society, as well as the differences among scientists as individuals.

Some of the scientists whose work is described in the series include Galileo Galilei, Marie Curie, Luther Burbank, John Dalton, Archimedes, Nicolaus Copernicus, William Beaumont, and Carl Linnaeus.

Each of the 35mm color filmstrips with accompanying audiotape cassettes can be used independently by individual students or as a basis for class or small-group discussion. A printed teacher's guide containing background information on the scientist, questions for discussion topics, and suggestions for followup activities is provided with each filmstrip.

The following summaries of several filmstrips indicate the scope and emphases of the series:

ANDREAS VESALIUS (1514-1564). The modern study of anatomy dates from Vesalius' work at the University of Padua. He was one of the first scientists to investigate human anatomy by dissection, and published a major text filled with highly accurate drawings of the various systems. In the filmstrip, his life and scientific work are described, and several of his still-famous anatomical drawings are shown. The filmstrip stresses Vesalius' teaching that the human body is a system composed of different systems that interact.

ANTOINE LAVOISIER (1743-1794). This French scientist completely reformed the system of classifying the then-known elements, and revised the system of chemical nomenclature. He is perhaps best known for his explanation of burning, and the filmstrip focuses on this work. His contact with the English scientist Joseph Priestley, and the effect of Priestley's discovery of oxygen upon Lavoisier's ideas and experiments, is explored. The filmstrip includes biographical information leading up to Lavoisier's execution in the aftermath of the French Revolution.

JOHN SCOTT HALDANE (1860-1936). Research on respiration and the solution of practical problems in mining and deep sea diving, were the major contributions of John Scott Haldane. This English scientist did major work on the effects of different levels of carbon dioxide and oxygen on the breathing process. His practical contributions include decompression tables still used in diving work today, an improved gas mask used in World War I, and important advances in overcoming the problem of deadly "mine damp" in coal mining. The filmstrip explores Haldane's life and focuses on both his scientific and practical contributions to society.

ANNA B. COMSTOCK (1854-1930). The foremost woman naturalist in America in her day, Anna Comstock strongly supported nature study in schools. She wrote a number of books on nature and taught many teachers how to incorporate nature study into their classes. She was also an accomplished wood engraver, illustrating many books, and became the first woman professor at Cornell University. In the filmstrip, her life is traced from earliest "nature walks" with her mother to her teaching days at Cornell. The filmstrip depicts many of the plants and animals studied by Anna Comstock.

RD 020 039

SUBJECT AREA(S)

The subject area covered in the filmstrips can be characterized as general science. (Most of the filmstrips can also be usefully employed in teaching social studies.)

INTENDED USERS AND BENEFICIARIES

Students of all abilities in grades 1 to 6 are the intended users.

Six of the filmstrips are designed primarily for children in grades 1 to 4 (see package A in "Materials and Equipment" section below); six filmstrips are primarily for children in grades 3 to 5 (package B); and six filmstrips are primarily for children in grades 4 to 6 (package C).

Although the primary audience is children in grades 1 to 6, the filmstrips later in the series (packages B and C) have been successfully used with 7th- and 8th-grade students during prototype and field testing.

GOAL(S) OR PURPOSE(S)

The filmstrip series is intended: (1) To provide the student with information about the lives, personalities, scientific accomplishments, and social contributions of men and women who have contributed to science; (2) to illustrate and examine the interactions between science and society; and (3) to help develop informed attitudes toward science and positive attitudes toward scientists.

PATTERNS OF USE

The filmstrips in the series are self-contained instructional materials and may be used singly or in any order. As noted in the "Intended Users" section above, the filmstrips earlier in the series are more suitable for younger children, while those later in the series are more suitable for older children. They may supplement any science program and may also be used in teaching social studies.

ASSESSMENT PROVISIONS

There is no formal testing. Questions included in the teacher's guides might suggest items that a teacher can use for assessing students' learning.

TIME REQUIREMENTS

Viewing and discussing each filmstrip normally requires one class period. If the suggested followup activities are done, more time is needed, the amount depending on student interest and teacher planning.

IMPLEMENTATION PROCEDURES

No special equipment, facilities, or organization is required.

ASSURANCES AND CLAIMS

Assurances

The "Men and Ideas" filmstrips have been widely used for 1 year. There is no evidence that any of them induces physical, psychological, or social harm.

There is no evidence that the filmstrips perpetuate sexism, racism, or other biases related to religion, age, or socioeconomic stereotypes. The word "men" in the series title produced some consternation among field-test teachers when the particular filmstrip was about a female scientist, but these incidents helped to call attention to and underscore one of the series' themes that both women and men contribute to science. The series includes persons with diverse personalities and representatives of both sexes and various cultural groups.

The field testing of the "Men and Ideas" filmstrips was conducted outside of the development site by Research for Better Schools, Inc. The developers have no direct control over the use that various purchasers are making of the approximately 2,300 copies of the commercial versions of the several filmstrips distributed to date.

Claims

The "Men and Ideas" filmstrips were originally developed for the Individualized Science (IS) program and underwent prototype and field testing as a part of the formative evaluation of IS. (For a discussion of this process, see Audrey B. Champagne and Leo E. Klopfer, "Formative Evaluation in Science Curriculum Development," *Journal of Research in Science Teaching*, 1974, 11, 185-203.) Based on the results of the several stages of critical examinations, classroom tests, and revisions that make up the formative evaluation of curriculum materials, it is claimed that the scientific, historical, and biographical content of the filmstrips is accurate and that the content of the filmstrips is appropriate for children in the school grade levels for which the filmstrips are intended.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Filmstrip and cassette tape, teacher's guide	1	12.95*	Every 5 years	
35mm filmstrip viewer or projector	1	30.00-55.00	Every 5 years	Any A-V supplier
Cassette tape player	1	25.00-40.00	Every 4 years	

*The following packages of six filmstrips, cassettes, and teacher's guides are available at $74.50 each:
Package A: Simpson, Galileo, Michelson, Burbank, Hooke, Curie
Package B: Lagrange, Vesalius, Black, Lavoisier, Dalton, Haldane
Package C: Comstock, Joule, Beaumont, Voit, Volta, Archimedes
For all 3 packages (18 titles), the price is $216.00.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Audrey B. Champagne, Project Codirector
Leopold E. Klopfer, Project Codirector

AVAILABILITY

Eighteen filmstrips in the series have been published, copyright 1972-74 (claimed until 1984). Three additional filmstrips are at the field-testing stage, and three more are being prepared for testing.

The six filmstrips at or near the field-testing stage are expected to be released in 1976 or in 1977 from:
Imperial International Learning Corp.
Box 548, Rte. 45 South
Kankakee, Ill. 60901

INFORMATION CURRENT AS OF MARCH 1975 ■

OVERVIEW

RONALD LESLIE
New York University
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Today's educational challenge is to provide appropriate instruction for a wide variety of learners. This is no small task. Many of our current educational practices are suspected of being ineffective because of a national decline of scores on reading and writing tests. New types of instructional programs, designed to reverse this trend, may pose new difficulties. For example, a major effort is currently being made by groups of parents and teachers to place students with special difficulties in the regular classroom. One of the immediate implications of this approach is a larger diversity of learners in the classroom than ever before. Educational researchers are thus faced with a twofold problem: They are asked to find ways of reversing the downward trend in communication skills and, at the same time, to create programs which are designed to meet the needs of an increasingly diverse school population.

The preparation of instructional programs which are appropriate for learners of different backgrounds and aptitudes requires a knowledge of the instructional process. This knowledge must be focused in several areas: (a) The state or characteristics of the learner, (b) the characteristics of the tasks and materials which we expect the learner to master, (c) the procedures and conditions of the learning environment (e.g., instructional methods and school organization) which can affect the learner's understanding, and (d) the methods of assessing individual and institutional change.

Historically, the improvement of educational outcomes has been attempted through one or both of two widely used innovations: (a) The adoption of new instructional programs, and (b) the reorganization of the school or classroom. The effectiveness of these innovations is determined by the nature of the changes. Frequently the changes do not reflect an increased understanding of the learner or the reading and writing process, but rather reflect some theoretical hypotheses of the authors which have not been adequately investigated. All too often a cycle of short-term increases in learner performance is followed by a decline in program effectiveness after the first few years of adoption. However, within the past decade there has been a change of emphasis in educational research, and an attempt is being made to develop and validate programs which reflect more than a speculatively theoretical understanding of reading and writing.

Conceptually, there are few coherent methods of developing instructional programs, of which two are the focus for much current activity. The first may be termed a skill strategy of curricular development and the second a process strategy. The skill strategy is to identify the skills (behavioral performance of specific tasks) which are either necessary or beneficial in reaching some other goal (e.g., reading a fourth-grade social studies text with understanding requires lexical, semantic, syntactic, and decoding skills). The isolation of the skills, the validation of their importance to reading or writing performance, and the sequencing of the skills for optimal transfer learning require extensive research. The result provides a basis for curricular development. The skills identified through research largely determine the goals of the curriculum and characteristics of the materials used. Information on the skill sequences are used in making decisions on the instructional sequence. Specific day-to-day instructional strategies are not determined by the information on the skills. Day-to-day instructional methods may be evaluated as the program is being implemented in the schools (formative evaluation). Many of the curricular programs developed by the NIE-sponsored educational laboratories and centers have used the skill strategy. In fact, these research programs have made major contributions to the development of methods to implement such an approach to curriculum development.

While there are many examples of the skill strategy, the process strategy remains an ideal which has not been implemented. This strategy assumes that the underlying psychological processes involved in skilled behavior often overlap for different skills. This would indicate that the basis of skilled performance often is not independent abilities. This approach also assumes that there may be performance abilities which reflect not only learning but also developmental changes in the learner. As noted by John B. Carroll, *Psychometric Tests as Cognitive Tasks: A New "Structure of Intellect,"* Office of Naval Research, 1974, the differences in the functioning of the underlying psychological processes may be used to account for individual differences such as those on intelligence tests. Since the process strategy is developed in terms of underlying psychological processes, this approach must seek an understanding of the factors which affect these processes. That is, the aim is to facilitate the learner's development of processing strategies which enable the learner to perform reading and writing tasks. Therefore, the particular characteristics of each instructional situation must be examined to determine whether or not it is likely to facilitate the specific processing abilities desired. The implementation of the process approach must concentrate on the day-to-day factors which affect learning, the factors which can conceivably change the way the learner processes the material in the instructional task. Logically, one of the first steps in implementing this strategy is the analysis of skilled performance in terms of processing capabilities and strategies

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of the learners. As of now, this programmatic task is just being started.

Federally funded research through the NIE has led to the creation of a number of successful curricular programs in reading and writing. While all of these programs and the research behind them cannot be covered here, a few programs will be noted which have made a major contribution to our knowledge of curricular development in reading and writing.

The learner

What have we learned about the characteristics of the learner that are clearly relevant for curricular development in reading and language arts? The clearest examples of using research about learner characteristics to develop curriculum are found in the area of beginning reading. Educational research on the skills necessary for learning to read has had a major impact on instructional programs (e.g., Beginning Reading Program, New Primary Grades Reading System, Wisconsin Design for Reading Skill Development (WDRSD): Word Attack, and the Prereading Skills Program). One particularly good example of using the skills strategy to develop a program is exemplified by the Prereading Skills Program. Research on the skills related to learning to read revealed the importance of distinguishing among global perceptual and auditory skills to isolate specific tasks important in the early reading instruction (e.g., distinguishing the order versus the orientation of letters as separate skills). The clear specification and validation of the skills led to another result, the elimination of skills not empirically related to the goal of learning to read (e.g., learning color names). Identified skills were used to define the program's objectives. Instructional methodologies which were not determined by the skills to be taught (e.g., learning some system for referring to sounds) were tested independently for effectiveness. The entire program was then evaluated in a series of test-and-revise evaluations which identified real and potential problems in the implementation of the program. The funding for such extensive development and evaluation has permitted the creation of an instructional program which uses the research knowledge to create a program, and extensive evaluation to see that the program is amenable to classroom implementation.

It is not clear that this skills strategy will be as successful with more complex reading comprehension programs. It is clear that our present knowledge does not identify and sequence the skills necessary for comprehending written material. The IRI Reading Program, which was under development at the Learning Research and Development Center (LRDC) and then at Research for Better Schools (RBS), was to implement such a strategy for a fourth-grade through sixth-grade program. However, the personnel at RBS came to the conclusion that there was not a sufficient base for creating a program based solely on reading comprehension skills. The resulting program, SPIRAL, combines specific skill instruction with high-interest literature in a uniquely designed program. Currently, there is no assurance that the skills-strategy approach will be more successful in the future.

Instructional tasks and materials

There are several reasons to examine the characteristics of materials which affect learner performance. If we understand the elements which contribute to the difficulty of performing some task such as understanding a passage of material, measures may be taken to reduce such difficulties either through instruction or changes in the material itself. Skill instruction, controlled vocabulary, and readability indexes are examples which have been used to achieve this result.

Future research will need to concentrate on identifying new characteristics of the text which are important in reading and writing. Textual material consists of a set of words, sentences, and paragraphs which follow some rules of organization. The ability to use the organizational structures as source of clues to the meaning of the text along with the more easily identified words, sentences, and paragraphs will determine, to a large part, the success of the communication. We have generally assumed that much of the knowledge is available from an understanding of the spoken language. But there is increasing evidence that by the fourth grade there are formal structures and logical operations in textual materials which are not often found in spoken language. An understanding of these forms will be necessary if programs are to be created which can deal with reading comprehension in the intermediate grades.

Learning environment

Many of the programs developed through the laboratories and centers attempt to integrate within new curricular programs changes in the instructional materials, the methods of instruction, and the classroom organization in which learning is to occur. Programs which specify the skills which are to be mastered by each child and which develop implementation strategies to teach these skills only to children who have not already learned them are exemplary of the concept of individualization. The specific benefits of individualization are becoming well documented. However, the methods of creating individualized instruction are often left to the teacher whose job it is to implement the program.

The research carried on at LRDC and WDRSD on implementing individualized curriculums have made these centers leaders in the field. Yet we are still a long way from understanding how to overcome all of the practical classroom problems involved in trying to insure that each child is considered as an individual with specific instructional needs.

Summary

The research emphasis in reading and language arts is changing. Strategies for translating research on the characteristics of the learner, the characteristics of the tasks and material to be mastered, the procedures and conditions of the learning environment, and methods of assessment into curricular programs are being developed and tested. Therefore, the possibility of providing appropriate instruction for a wide variety of learners may be considered a realistic goal.

RD 030 001

SWRL/GINN SPELLING PROGRAM

*A program for conducting sequential spelling instruction
for children in grades K-6*

The *SWRL/Ginn Spelling Program* provides research-based, classroom-verified resources for conducting sequential spelling instruction. The performance-based program is generally used in grades K-6.

The program provides students with the skills needed to spell words used in their written communication. The program is based on linguistic research which has demonstrated that English spelling is regular: The relationship between the pronunciation and spelling of English words facilitates the spelling of a large number of words. Using these relational principles, students can spell large classes of words without learning each word individually. While spelling of words taught in the program provides the specific context for spelling instruction, the learned spelling skills will enable students to spell many other words.

The program content sequence has been designed to provide cumulative learning experiences. New spellings build on previously learned spellings and are maintained and reused in subsequent instruction.

SWRL/Ginn Spelling Program instruction moves through an orderly progression:

First, students practice visual recognition of spellings and oral discrimination sounds.

Second, students practice spelling sounds. While this practice focuses on individual sounds and spellings, it is conducted within the context of whole words; thus students' attention is drawn to specific features of English spelling without losing sight of the words in which they occur.

Third, students can spell sounds individually, they spell program words containing newly taught spellings as well as previously learned spellings.

Fourth, students apply spellings to new, unpracticed words, thus moving beyond a restricted list of words to the larger number of words which they can spell by means of their newly acquired skills.

The program is integrated into regular classroom instruction and is typically teacher-directed in large-group instruction or teacher-, tutor-, or aide-directed in small-group or individual instruction.

SUBJECT AREA(S)

The *SWRL/Ginn Spelling Program* promotes specific English language spelling skills and an understanding of relationships between English pronunciation and English spelling.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades K-6.

GOAL(S) OR PURPOSE(S)

The product stresses six outcome areas:

1. Predictable spellings—The pupil learns to spell words with predictable or regular spellings. Predictable spellings are those that can be determined on the basis of the sounds in the word. An example is "bat."
2. Unpredictable but common spellings—The pupil learns to spell a set of frequently used words with unpredictable but common spellings and to use a dictionary to determine the spelling of other words. An example is "heat."
3. Unpredictable and rare spellings—The pupil learns to spell words with unpredictable and rare (irregular) spellings. The spellings in these words do not follow rules and are learned through frequent exposure and use. An example is "laugh."
4. Affixes and affixation rules—The pupil learns to spell a set of frequently used suffixes and prefixes and learns to apply the rules for adding them to root words. An example is "hoping."
5. Punctuation rules—In addition to spelling rules, the pupil learns a set of punctuation rules, including use of capital letters, periods, and apostrophes.
6. Reference sources—The pupil learns to use reference sources to determine the spelling of words.

PATTERNS OF USE

The program is organized into ungraded blocks of instruction. This organization permits pupils to be placed in the program at a point appropriate to their current spelling ability. Each block consists of six units of instruction. Within each unit, there are three types of activities: Instruction, assessment, and supplementary instruction.

The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills. Program resources enable the teacher to supplement planned spelling activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific spelling program skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction on program skills.

The spelling program Quality Assurance (QA) system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The QA system also provides a means by which the pupil proficiency attained with the program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

Scheduling and length of lessons will vary with teacher judgment of pupil learning needs. In kindergarten, three lessons a week of 10-15 minutes are generally completed. Other grades typically require daily lessons of 20-30 minutes each. Pupils receiving instruction on such a schedule complete two blocks of the program in a school year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the spelling program efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the programs effectively, and to conduct this training within the time conventionally available to school personnel. Also included in the installation system are materials for performing administrative functions related to the *SWRL/Ginn Spelling Program*.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 35 tryouts involving in the aggregate more than 750 classrooms and 20,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which they have been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout-monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and made available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil materials				
Activity packets				
Block 1	2 per pupil	13.90	Reusable	
Block 2	2 per pupil	9.90	Reusable	
Block 3	2 per pupil	14.90	Reusable	
Block 4	2 per pupil	15.90	Reusable	
Block 5	2 per pupil	16.90	Reusable	
Block 6	2 per pupil	14.90	Reusable	
Block 7	2 per pupil	14.90	Reusable	
Teacher materials guide, practice				
Exercise, filecares				
Block 1	1 per teacher	12.20	Reusable	
Block 2	1 per teacher	12.20	Reusable	
Block 3	1 per teacher	15.70	Reusable	
Block 4	1 per teacher	17.70	Reusable	
Block 5	1 per teacher	20.70	Reusable	
Block 6	1 per teacher	21.70	Reusable	
Block 7	1 per teacher	14.70	Reusable	
SWRL spelling program training and installation components				
SWRL spelling program audiovisual training package: Contains 1 copy each of a filmstrip, audio cassette, and script	1 per 3 schools	7.50	Resuable	SWRL, 4665 Lampson Ave., Los Alamitos, Calif. 90720
SWRL spelling program printed materials training package: Contains 12 copies of SWRL spelling program information booklet	1 per 12 teachers	1.00	Reusable	
General CSP training and installation components:				
16mm film, "SWRL Communication Skills Programs," with filmstrips, audio cassettes and scripts	1 per 3 schools	60.00	Reusable	SWRL, 4665 Lampson Ave., Los Alamitos, Calif. 90720
CSP printed materials training package contains 12 each of SWRL CSP information booklet, general program characteristics summary sheet, SWRL program planning guide	1 per 3 schools;	16.00	Reusable	
Coordinator's manual	1 per coordinator plus 1 per trainer	.50	Reusable	

Note: Program materials for blocks 8-14 are of a similar nature.

RD 030 001

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Spelling Program* carries a 1975 copyright, and is currently available from:

Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

SWRL/GINN COMPOSITION PROGRAM

A program for conducting sequential composition instruction for children in grades K-6

The *SWRL/Ginn Composition Program* provides research-based, classroom-verified resources for conducting sequential composition instruction. The performance-based program is organized into ungraded blocks of instruction, generally used in grades K-6.

Program outcomes develop a carefully designed sequence of skills leading to the fluency and clarity necessary for children to communicate using a variety of written forms. Early blocks of the program develop basic handwriting skills. The children systematically develop writing fluency to the level where they can plan and write short stories containing several well-punctuated sentences. Children practice carefully sequenced writing tasks that gradually increase in complexity until they are able to write entire story beginnings and create and write their own original endings.

Later blocks of the program teach students to communicate effectively using formats that include prose paragraphs, lists, stories, letters, and summaries. A plan-write-revise sequence is followed. Many activities involve group discussions in which students orally analyze compositions to discover what makes them effective and then plan similar compositions of their own. Editing and rewriting skills are stressed throughout the program.

SUBJECT AREA(S)

The program teaches a variety of composition skills to children in the elementary grades.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades K-6.

GOAL(S) OR PURPOSE(S)

Pupils participating in the *SWRL/Ginn Composition Program* develop numerous skills necessary for effective written communication. Program skills progress from writing letters and single words, to writing phrases and sentences, to writing creative compositions for a variety of purposes. Major skill areas include: Planning, analyzing, and summarizing; describing, informing, and persuading; and handwriting, punctuating, and editing.

PATTERNS OF USE

The program is organized into ungraded instructional blocks, each containing two units of instruction. Within each unit, there are three types of activities:

Instruction—Varied materials and procedures introduce and provide practice on the program outcomes.

Assessment—Criterion exercises identify the extent to which pupils have attained the program outcomes.

Supplementary instruction—Practice exercises provide supplementary instruction for individuals or groups of pupils who have not yet attained the unit outcomes.

The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills. Program resources enable the teacher to supplement planned activities in accordance with pupil interest and learning

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific program skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction.

The Composition Program Quality Assurance (QA) system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The QA system also provides a means by which the pupil proficiency attained with the program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

Scheduling and length of lesson activities depend upon pupil learning needs and interests, and the amount of instructional time available. Each of the composition program blocks represents approximately one semester of instruction. Generally, pupils complete two instructional blocks during a school year when three 30- to 40-minute sessions of composition instruction are conducted weekly.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the composition program efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials for performing administrative functions related to the *SWRL/Ginn Composition Program*. For example, there are suggestions for: Conducting briefing sessions for school boards, parents, and community members; ordering and distributing materials; conducting followup training sessions for teachers; monitoring the operation of the program during the school year; and integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 17 tryouts involving more than 3,000 classrooms and 90,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Activity packet				
Blocks 1 and 2	2 packets per 32 pupils per block	12.15	Yearly	
Blocks 3 and 5	2 packets per 32 pupils per block	13.30	Yearly	
Blocks 6-8	2 packets per 32 pupils per block	14.50	Yearly	
Block 4	2 packets per 32 pupils per block	17.70	Yearly	
Program guide Blocks 1-4	1 per teacher	1.00 each	Reusable	
Program guide Blocks 5-8	1 per teacher	1.50	Reusable	
Activities and materials guide Blocks 1-8	1 per teacher per block	1.00	Reusable	
Filecards				
Blocks 1 and 2	1 set per teacher per block	1.50	Reusable	
Blocks 5-8	1 set per teacher per block	3.50-3.90	Reusable	
Blocks 9-14	1 set per teacher per block	Not yet determined		
SWRL composition program training and installation components:				
SWRL composition program audio-visual training package (filmstrip, audio cassette, and script)	1 per 3 schools	7.50	Reusable	
SWRL composition program printed materials training package containing 12 program information booklets	1 per 12 teachers	1.00	Reusable	
General CSP training and installation components:				
16 mm film *SWRL Communication Skills Programs*	1 per 3 schools	60.00	Reusable	
CSP audio-visual training package (filmstrips, audio cassettes and scripts	1 per 3 schools	16.00	Reusable	
CSP printed materials training package (12 each of the following: CSP information booklets, general program characteristics summary sheet, program planning guide)	1 per 12 teachers	4.00	Reusable	
Coordinator's manual	1 per coordinator plus 1 per trainer	.50	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Composition Program* carries a 1975 copyright, and is currently available from:

Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 003

SWRL/GINN EXPRESSIVE LANGUAGE PROGRAM

A program designed to develop the oral language and expressive skills of elementary school children

The *SWRL/Ginn Expressive Language Program* provides research-based, classroom-verified resources for conducting instruction that develops oral language and expressive skills of elementary school children. The performance-based program is generally used in grades K-6.

The program outcomes develop a carefully designed sequence of skills important to both the academic and social development of children. In early blocks, children learn nonverbal expressive skills as they use movements, gestures, and facial expressions to portray various characters and situations. As the children gain confidence, they learn to read scripts and improvise dialog to convey a variety of moods and feelings, create entertaining story endings, and give short talks in a public-speaking format. In later blocks, students perform interpretative pantomime, further extend their story-creating skills, and present talks that persuade the listener or explain how to do something. They begin to act out fully scripted plays.

Program materials provide comprehensive resources for the teacher with no background or training in drama and public speaking and enhance the resources available to the teacher experienced in program areas.

Instructional resources combine flexible format and multimedia design. They provide classroom-verified options for development of expressive language skills. Materials including activity posters, dialog sheets, play scripts, story ideas, tongue twisters, paper puppets, story sheets, and audiotapes insure a rich variety of learning experiences.

Teacher materials provide suggestions for introducing specific expressive language skills, for conducting activities that promote attainment of the skills, and for effective utilization of all program resources during instruction.

The program is integrated into regular classroom instruction and is typically teacher-directed in large- or small-group instruction. Aides or other paraprofessionals can be used in directing small-group instruction.

SUBJECT AREA(S)

The program promotes development of specific oral language and expressive skills.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades K-6.

Program resources were designed for teachers with varying expressive language backgrounds. They provide comprehensive materials and procedures for teachers with little or no background in areas related to drama and public speaking, and enhance the instructional options of teachers who have expressive language experience.

GOAL(S) OR PURPOSE(S)

Program activities, designed to be enjoyable and meaningful for the pupil, promote skills in the following outcome areas:

1. Nonverbal Expression—The pupil uses gestures, movements, and facial expressions that accurately portray a given situation, story, or character, or are appropriate to a given talk.
2. Vocal Expression—The pupil speaks clearly with adequate volume and uses vocal expressions which appropriately communicate a given character, mood, or purpose.
3. Fluency—The pupil fluently and confidently verbalizes complete sentences without long pauses.
4. Planning—The pupil plans and presents stories and story endings that contain interesting problems and solutions (plots). In public speaking, the pupil plans talks that contain a beginning, middle, and end.
5. Verbal Content—The pupil creates and uses coherent dialog that follows a given story line. In talks, the pupil uses statements, examples, and reasons that accomplish a given purpose (e.g., to describe, instruct, persuade, inform).
6. Evaluation—The pupil states likes about performances and offers constructive suggestions for improvement.

PATTERNS OF USE

The program is organized into ungraded instructional blocks that contain two units per block. Within each unit, there are three types of activities:

1. Instruction—Program materials and procedures introduce and provide practice on the program outcomes.

2. Assessment—Criterion exercises identify the extent to which pupils have attained program outcomes.

3. Supplementary instruction—Practice exercises provide supplementary instruction for individuals or groups of pupils experiencing difficulty on the unit outcomes.

The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills. Program resources enable the teacher to supplement planned activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific program skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction.

The Expressive Language Program Quality Assurance (QA) System includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The QA system also provides a means by which the pupil proficiency attained with the program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

Scheduling and length of lesson sessions will vary with teacher judgment of pupil learning needs and the amount of instructional time available. Generally, pupils complete two instructional blocks during a school year, when three sessions a week are scheduled for the program (approximately 20 minutes per session for kindergartners and 30-40 minutes for subsequent grade levels).

IMPLEMENTATION PROCEDURES

The Training and Installation System includes the resources that enable a school district to install the *SWRL/Ginn Expressive Language Program* efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively, and to conduct this training within the time conventionally available to school personnel. Also included in the Installation System are materials for performing administrative functions related to the product.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 16 tryouts involving in the aggregate more than 2,600 classrooms and 78,300 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Activity packet				
Blocks 1 and 2	2 packets per 32 pupils	7.50	Yearly	
Blocks 3 and 4	2 packets per 32 pupils	6.60	Yearly	
Blocks 5 and 6	2 packets per 32 pupils	25.80	Yearly	
Blocks 7 and 8	2 packets per 32 pupils	28.80	Yearly	
Program guide Blocks 1-8	1 per teacher	1.50	Reusable	
Activities and materials guide Blocks 1-8	1 per teacher per block	1.00	Reusable	
Filecards, Blocks 1-8	1 per teacher per block	6.00	Reusable	
Audiotapes Blocks 1-8	1 per teacher for blocks used	6.00	Reusable	
Activity posters Blocks 1, 2, 3, 4, 5, and 7	1 set per teacher for blocks used	5.80-8.00	Reusable	
Program materials Blocks 9-14	1 set per teacher for blocks used	Not yet determined		
16 mm film *SWRL Drama and Public Speaking*	1 per 3 schools	60.00	Reusable	SWRL
SWRL expressive language program audio-visual package containing 1 filmstrip, 1 audio cassette, and 1 script	1 per 3 schools	7.50	Reusable	SWRL
SWRL expressive language program printed materials package containing 21 SWRL expressive language information booklets	1 per 12 teachers	1.00	Reusable	SWRL

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Expressive Language Program* was copyrighted in 1975, and is currently available from:
Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

SWRL/GINN BEGINNING READING PROGRAM (BRP)

A program to help children with sequential instruction in beginners' reading, generally used in kindergarten

The *SWRL/Ginn Beginning Reading Program* (BRP) provides research-based, classroom-verified resources for conducting sequential instruction in beginning reading. The performance-based program is generally used at the kindergarten level.

The program provides comprehensive materials and procedures that assist the teacher in promoting each child's reading skills. Program resources include storybooks, pupil practice exercises, comprehension exercises, suggestions for instructional games, assessment exercises and record sheets, a teacher's manual, and a resource kit including various flashcards and procedure cards.

Instruction in the program was designed to be a pleasant and successful experience for young children and to maximize their active participation in the learning process. Children have the opportunity to read many appealing short stories and to take part in a variety of instructional games. They receive personal copies of each storybook and are encouraged to use the books in practicing their newly acquired reading skills at home, as well as in the classroom.

Instructional support options accompanying BRP include the tutorial, parent-assisted learning, and summer reading programs.

SUBJECT AREA(S)

The program develops the reading competence of young children.

INTENDED USERS AND BENEFICIARIES

This program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been used successfully with a wide range of pupils in prekindergarten, kindergarten, and 1st grade.

GOAL(S) OR PURPOSE(S)

The majority of skills taught in the program can be classified under four outcomes to be attained by children:

(1) Words—The ability to read the 100 words taught directly in the program,

(2) Word Elements—The ability to identify 23 initial and ending word elements,

(3) Word Attack--The ability to sound out and read any one-syllable word composed of word elements taught in the program,

(4) Letter Names—The ability to name each letter of the alphabet, when shown the printed letter in either uppercase or lowercase forms.

The reading skills to be acquired by the children are listed explicitly throughout the program.

PATTERNS OF USE

The program is organized into 10 units to provide checkpoints for assessment of each child's progress. Instruction in each unit promotes basic reading skills through carefully planned and sequenced activities.

Three instructional support options accompany the program, enabling the teacher to utilize the structured assistance of parents, aides, and tutors.

(1) The Tutorial Program—Upper-grade pupils, aides, or other nonprofessionals are trained to use specially prepared materials and procedures to tutor kindergarten pupils. The tutorial program supplements regular classroom instruction in the BRP by providing additional practice for those children who have not yet attained program outcomes.

(2) The Parent-Assisted Learning Program (PAL)—PAL supplements regular classroom instruction in the BRP by providing the teacher with active and structured assistance from each child's parents. Each week the teacher sends home materials relating to instruction presented the previous week. Parents use instructional exercises and learning games that provide practice on the specific reading skills being developed by the teacher in the classroom.

(3) The Summer Reading Program—A 10-week, parent-guided summer program following the kindergarten year helps children maintain and improve the reading skills acquired in kindergarten. Sequenced materials and explicit instruction are provided for parents to follow.

ASSESSMENT PROVISIONS

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific reading skills. Practice exercises are provided for those pupils whose scores indicate they would benefit from supplementary instruction on program skills.

The BRP Quality Assurance System includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The system also provides a means by which the pupil proficiency attained with BRP can be credited in a manner that is understandable to parents and others interested in the schools.

TIME REQUIREMENTS

Scheduling and length of instruction activities depend upon teacher determination of pupil learning needs and the amount of instructional time available.

Previous use of the program indicates that most children attain the planned learning outcomes in 1 school year when approximately 3 weeks per unit and 25 minutes per day are allocated to BRP instruction.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the *SWRL/Ginn Beginning Reading Program* efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively, and to conduct this training within the time conventionally available to school personnel.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 57 tryouts involving more than 14,400 classrooms and 480,200 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance (QA) has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and are available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars		Replacement Rate and Cost	Source if Different from Distributor
		List price	*School Price*		
Teacher and pupil materials including teacher's manual, procedure cards, activities and materials guides, entry test, flashcards, animal cards, game index, storybooks, criterion exercises, practice exercises, badges, class record sheets, entry tests, comprehension sheets	1 set per 30 pupils	231.80	173.85	Reusable except for storybooks, criterion exercise training lesson, criterion exercises, good work badges, class roster and class record sheets, entry behavior tests, and comprehension sheets (yearly)	
Pupil materials including storybooks, criterion exercises and training lesson, practice exercises, badges, class record sheets, entry tests, comprehension sheets	1 set per each additional 30 pupils	216.00	162	Yearly	

MATERIALS AND EQUIPMENT (continued)

Required Items	Quantity Needed	Cost per Item in Dollars		Replacement Rate and Cost	Source if Different from Distributor
Training kit including installation guide, trainer's guide, 2 filmstrips, cassettes, scripts, display packs, sample materials package	1 set per district	73.84	55.38	Reusable except for display packs and sample materials package (yearly)	
Display packs and sample materials package	1 set per each 10 additional teachers	25.68	19.26	Yearly	
Training film	1 per district	80.00	60.00	Reusable	
Tutorial materials including filmstrips, cassettes, scripts, school guide, teacher's manual, assignment sheets, identification cards, practice exercises, word element guide, role playing exercises	1 set per 12 tutors	54.56	40.92	Yearly except for filmstrips, cassettes, and scripts (reusable)	
Additional tutorial materials	1 set per each additional 12 tutors	26.56	19.92	Yearly	
Parent-assisted learning materials: Planning guide, parent's guide, practice exercises	1 set per 10 pupils	26.56	19.92	Yearly	
Summer reading materials: School guide, parent's guide, posters, storybooks, practice exercises	1 set per 10 pupils	20.00	15.00	Yearly	
Support systems training film	1 per district	80.00	60.00	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Beginning Reading Program* was copyrighted in 1972. It is currently available from:

Ginn and Company
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 005

SWRL/GINN READING PROGRAM

A program to assess the reading level of students in grades K-12

The *SWRL/Ginn Reading Program* provides research-based, classroom-verified resources for conducting instruction that helps children become effective independent readers. The performance-based program is organized into ungraded instructional blocks, generally used in grades K-3.

The program is based on three premises: (1) Spelling-to-sound correspondences are basic in learning to read, (2) the vocabulary for reading materials should match the vocabulary of the child, and (3) reading skills should be extended to tasks useful to the child in academic and personal endeavors.

Emphasis in the *SWRL/Ginn Reading Program* is on two classes of reading outcomes—word recognition and reading comprehension. In word recognition, pupils are taught to read most program words through a decoding process. The content and sequence of these decoding skills are based upon extensive linguistic research. The result is a unique reading program that takes maximum advantage of the phonetic regularities of the English language. The words that pupils read illustrate and provide practice for recently learned letter sounds. These letter sounds enable pupils to quickly decode a large number of frequently used words.

Throughout the program, comprehension activities are integrated with the word recognition content. Early emphasis is placed on the literal meaning of words and sentences already familiar to the pupil. By employing newly acquired decoding and comprehension skills in other program activities, pupils have frequent opportunities to extend their reading vocabulary. Upper blocks of the program emphasize more complex comprehension skills such as understanding words in sentence and paragraph contexts, and story interpretation. These comprehension activities are structured to give additional practice on previously taught word recognition skills.

Other program outcomes, including library reading, alphabetizing, and summarizing textual materials, extend pupils' reading activities into the broad reading environment in which they live. The program is designed to provide enjoyable and successful reading experience.

SUBJECT AREA(S)

The *SWRL/Ginn Reading Program* helps children develop the skills needed to become effective, independent readers.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades K-3.

GOAL(S) OR PURPOSE(S)

The program promotes independent reading skills in elementary school children. Program outcomes are: (1) To develop word-attack skills and (2) to develop comprehension skills. Word-attack proficiency includes learning decoding skills and sight words. Comprehension skills include study of word, sentence, and paragraph meanings in a variety of contexts. Instruction includes a wide array of literal and interpretive information-processing activities.

PATTERNS OF USE

The ungraded program is organized into eight instructional blocks. This organization facilitates pupil placement consistent with current reading skills. Each block consists of four to six units of instruction. Within each unit, there are three kinds of activities:

Instruction—materials and procedures introduce and provide practice on the program outcomes;

Assessment—criterion exercises identify the extent to which pupils have attained program outcomes; and

Supplementary Instruction—practice exercises provide supplementary instruction for pupils who have not yet attained specific unit outcomes.

The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills. Program resources enable the teacher to supplement planned reading activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific Reading Program skills. Materials are provided for those pupils whose scores indicate they might benefit from supplementary instruction on program skills.

The Reading Program Quality Assurance (QA) System includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The QA System also provides a means by which the pupil proficiency attained with the Reading Program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

The scheduling and length of instructional lessons will vary with teacher judgment of pupil learning needs. The program is organized into eight ungraded blocks of instruction. When approximately 30 minutes of teacher-directed reading instruction is presented daily, pupils generally complete two blocks of instruction in a school year.

IMPLEMENTATION PROCEDURES

The Training and Installation System includes the resources that enable a school district to install the program efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively, and to conduct this training within the same time conventionally available to school personnel. Also included in the Installation System are materials for performing administrative functions related to the program.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 25 tryouts involving more than 1,800 classrooms and 53,700 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Activity Packet Blocks 1 & 2	2 packets per 32 pupils per block	8.55 & 9.70, respectively	Yearly	
Activity Packet Blocks 3-8	2 packets per 32 pupils per block	9.70-23.30	Yearly	

MATERIALS AND EQUIPMENT (continued)

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Storybook Packet Blocks 1-8	1 packet per 32 pupils per block	46.00-75.00	Reusable	
Program Guide Blocks 1-8	1 per teacher	1.50	Reusable	
Activities and Materials Guides Blocks 1-8	1 per teacher per block	.75-1.20	Reusable	
Filecards Blocks 1-6	1 per teacher per block	7.50-13.50	Reusable	
Filecard Box	1 per teacher	.50	Reusable	
Practice Exercises Blocks 1-8	1 set per teacher per block	2.90-4.32	Reusable	
Teacher's Edition of Activity Book Blocks 3-8	1 per teacher per block	1.20-2.60	Reusable	
SWRL Reading Program Training and Installation Components:				
SWRL Reading Program Audio-Visual Training Package (filmstrips, audiocassettes, and scripts)	1 per 3 schools	12.00	Reusable	SWRL
SWRL Reading Program Printed Materials Training Package (12 copies each:)				
SWRL Reading Program Information Booklet	1 per 12 teachers	1.00	Reusable	
General CSP Training and Installation Components:				
16mm film "SWRL Communication Skills Programs"	1 per 3 schools	60.00	Reusable	
CSP Audio-Visual Training Package (filmstrips, audiocassettes, and scripts)	1 per 3 schools	16.00	Reusable	
CSP Printed Materials Training Package (12 each of the following:) SWRL CSP Information Booklet, SWRL CSP General Program Characteristics Summary Sheet, and SWRL Program Planning Guide	1 per 12 teachers	4.00	Reusable	
Coordinator's Manual	1 per coordinator plus 1 per teacher	.50	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Reading Program* was copyrighted in 1973, and is currently available from:

Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

SWRL/GINN ADVANCED READING PROGRAM

A program used in grades 4-6 which emphasizes critical reading

The *SWRL/Ginn Advanced Reading Program* provides research-based, classroom-verified resources for conducting reading instruction. The performance-based program is generally used in grades 4-6.

The program emphasizes critical reading and literary criticism and is appropriate for use with pupils who have attained basic word recognition and decoding skills. Critical reading outcomes relate to the student's ability to comprehend logical and persuasive techniques while reading. Instruction is designed to teach the nature of explanatory and logical development and to identify common persuasive writing techniques. Instructional content includes both descriptive and explanatory passages.

Literary criticism outcomes relate to the student's ability to identify and understand literary techniques used and their intended effects on the reader. Content for these outcomes is drawn from selected works of fiction containing examples of plot, setting, characterization, theme, and certain aspects of style.

Extended reading lessons have been designed to provide options that are responsive to different learner requirements. Students who have acquired the desired instructional concepts practice applying them in the wider range of reading materials available in the classroom, home, and library. Students having difficulty in attaining the instructional outcomes receive supplementary practice.

SUBJECT AREA(S)

Advanced reading skills emphasizing critical reading and literary criticism are promoted in the program.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been field tested with a wide range of pupils in grades 4-6.

The program goal helps beginning readers who have attained word recognition and decoding proficiency to become advanced readers. Pupils who have completed block 8 of the program, for example, have attained this proficiency.

GOAL(S) OR PURPOSE(S)

The *SWRL/Ginn Advanced Reading Program* has two major outcome areas: Critical reading and literary criticism. Critical reading outcomes relate to the student's ability to comprehend logical and persuasive techniques as they are read. Literary criticism outcomes relate to the student's ability to identify and understand literary techniques used and their intended effects on the reader. Students develop and use skills that allow them to describe, analyze, evaluate, and interpret what they have read.

PATTERNS OF USE

The program is organized into ungraded instructional blocks. This organization allows pupils to be placed in the program at the point most appropriate to their current level of reading ability. Each block contains 4 instructional units of 8-15 lessons each.

Classroom instruction generally relates to five activities that recur throughout the lessons:

Introduction—Tells the students what they are going to learn about and why it is important.

Defining the concept—Gives the students an explanation of the concept, including its defining characteristics.

Acquiring the concept—Gives students practice in identifying the concept.

Applying the concept—Provides materials for students to use in practicing the outcome independently. The concept is practiced in the context of stories and poems as well as arguments, essays, articles, and charts.

Extending the concept—Encourages students to use their newly acquired skills in their outside reading.

Extended reading lessons—Provide instructional options that are responsive to differing learner requirements.

The block structure of the program facilitates pupil placement, instructional planning, and grouping based on pupil attainment of specific program skills. Program resources enable the teacher to supplement planned reading activities in accordance with pupil interest and learning.

ASSESSMENT PROVISIONS

Placement materials and procedures facilitate assignment of pupils to instructional blocks based on sound information regarding pupil skill attainment.

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific reading program skills. Suggestions are provided for assisting those pupils who might benefit from supplementary instruction on program skills.

RD 030 006

The Quality Assurance (QA) System includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The QA System also provides a means by which the pupil proficiency attained with the Reading Program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

Lesson scheduling and length will vary with the complexity of the outcome, the emphasis the teacher wishes to place upon the outcome, and teacher judgment of pupil learning needs.

The program is organized into eight ungraded blocks of four instructional units each. A unit includes 8-15 lessons, generally requiring 45-60 minutes of classroom time. Pupils typically complete two blocks of instruction during a school year.

IMPLEMENTATION PROCEDURES

The Training and Installation System includes the resources that enable a school district to install the Advanced Reading Program efficiently and effectively. For example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the programs effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the Installation System are materials for performing administrative functions related to the *SWRL Advanced Reading Program*. For example, there are suggestions for: conducting briefing sessions for school boards, parents, and community members; ordering and distributing materials; conducting followup training sessions for teachers; monitoring the operation of the program during the school year; and integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 18 tryouts involving more than 50 classrooms and 1,300 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance as related to compliance with extant codes in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as Quality Assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proved especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom sets—lesson sheets	1 per 30 pupils per block	20.00	Yearly	Ginn & Co., 191 Spring St., Lexington, Mass. 02173
Pupil booklet package	1 per 30 pupils per block	120.00	Reusable	
Set of activities and materials guides	1 per teacher per block	10.00	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Advanced Reading Program* is available for the 1975-76 school year from:

SWRL Educational Research and Development
Division of Resource Services
4665 Lampson Ave.
Los Alamitos, Calif. 90720

The product will be available for the 1976-77 school year from the distributor. Copyright which has not yet been determined is projected for 1975 or 1976.

Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 007

TEACHING STRATEGIES IN COMMUNICATION

A package for 9th-grade students who are not succeeding in the usual language arts approaches

Strategies in Communication was originally designed for 9th-grade students who were not succeeding in the language arts taught by the traditional approaches. The program is now designed to be used in a regular classroom, without the necessity of segregating the so-called "slow learners." It provides a valuable experience for all students.

The materials in this package include a manual for teachers, strategy guides, student strategies, and a listening record.

The teacher's manual gives the teacher the background of the project, a full description of the techniques used in the teaching strategies, a description of how to use the strategies, a list of program and course goals, an appendix on the use of role playing in the classroom, an appendix of models, and a table of contents listing objectives for all the strategies and an index to the manual and the strategy guides.

There are 117 strategy guides in interaction, listening, speaking, reading, and writing. Each strategy is on a separate card for easy reference and various combinations.

Learning strategies for students in inexpensive pads accompany the guides so that they may be given to students and serve as introductions and guidelines for their participation. They are not workbook or programed exercises, but rather guides which allow students to select their own learning objectives, activities, and evaluation strategies. A record of sounds in various groupings is provided, with suggestions for a number of uses.

The instructional design allows for complete individualization of learning activities, with teachers and pupils able to select themes or topics for interaction and individuals selecting or designing their own learning strategies and pursuing their own unique interests. The teacher uses the teaching strategies for motivation and exploration, while the students use their learning strategies for specific activities.

SUBJECT AREA(S)

This is a set of language arts materials including listening, speaking, reading, and writing.

INTENDED USERS AND BENEFICIARIES

The intended users are junior high school students, grades 7 to 9, who are not succeeding in traditional English courses.

The field test indicated that the materials, if selected properly, can be effective at any of the above grade levels with students of any ability.

GOAL(S) OR PURPOSE(S)

The program goals are to aid the teacher in the promotion of student growth and helping the student: (1) To learn that a student's own perceptions, experiences, and values—a personal world view—are valid measures of what the student hears and reads; (2) to develop responsibility for a student's own learning; (3) to recognize a student's own responsibility to the group; (4) to gain and improve skills in group communications processes; (5) to gain respect for the fruitful exchange of ideas; (6) to gain a workable understanding of the dynamics of reading, writing, speaking, and listening; (7) to gain a meaningful experience in identifying the exploring issues and in making decisions; and (8) to learn various approaches to learning, interpreting, and measuring information.

In addition, there are 117 specific behavioral objectives, one for each strategy, all of which support the program goals.

PATTERNS OF USE

Teaching Strategies in Communication is intended for supplementary classroom use as an extra resource for teachers and students who want and need to individualize their programs. They are organized in a sequence in order to systematically build toward broader concepts and more highly developed skills. However, no particular sequence is necessary.

ASSESSMENT PROVISIONS

Each teaching strategy has a list of evaluation suggestions for teacher use at the conclusion of the learning activities which reference each objective. Teachers are encouraged to assist students in planning their own assessment.

TIME REQUIREMENTS

Some activities take as little as 15 or 20 minutes, while others could grow into extended sequences lasting several class periods of 40 or 50 minutes each. The strategies are flexible.

IMPLEMENTATION PROCEDURES

The strategies are mostly content free; they can be used in conjunction with an almost infinite array of curricular materials. This attempt to provide the teacher with strategies which are instructionally sound is, therefore, compatible with numerous curriculums.

The strategies articulate well with any number of class organizational plans. In the field test, they were used in self-contained homerooms, departmentalized arrangements, cross-grade groupings, and team situations.

The strategies were designed to be free of specific media requirements. Equipment and other materials readily available in every junior high school can and should be used with the strategies. For example, all field test teachers had cassette players and recorders available and were able to use regular library and other materials existing in their schools. The strategies are not dependent on any one specific piece of equipment or set of books.

Personnel training costs would be minimal, although inservice support would enhance the use of the strategies. Because some teachers expressed a feeling of inadequacy in carrying on group activities suggested by strategies like role playing, small discussion sessions, and dramatizations, a set of interaction strategies was added to help teachers establish a classroom climate for interaction.

ASSURANCES AND CLAIMS

Assurances

The materials were reviewed inhouse for fairness to human subjects and were found not to be harmful or place any individual, sex, or group at risk.

Claims

The materials have been used and studied carefully in more than 30 classrooms and have been reviewed by content experts. Classroom teachers who used the materials and the experts who reviewed them agreed that the package was one of the best collections of a variety of activities for teaching language arts of which they were aware. Most teachers reported that the materials worked well as a supplement to their regular curriculum and style of teaching. Of the teachers completing an analysis of the materials, 96 percent said the materials had merit, 75 percent thought the product met needs not addressed by other existing materials, and 81 percent said they would recommend them to a fellow teacher.

The comments of teachers and experts indicated that the materials did contribute toward achieving student involvement and responsibility goals. The materials also provided a variety of suitable activities and guidelines which were viewed as a valuable support and aid for the teacher who wanted to use group-teaching techniques. When used as a supplementary curriculum, teachers found the materials interesting, relevant, and challenging. A detailed evaluation report for the materials is available from the developer upon request. Indications for minor revisions of the materials based on evaluation data are included in the report.

All field test teachers were selected randomly throughout the Pacific Northwest. The materials were found to be transportable to rural, city, and suburban sites without special teacher education or other installation activities.

RD 030 007

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's manual	1 per teacher	To be announced*	Reusable	To be announced
Set of teaching strategies	1 set per teacher	To be announced	Reusable	To be announced
Set of learning strategies	Pads of 30 per strategy	To be announced	Consumable yearly	To be announced

*Estimated yearly cost per student including installation cost of $4.50.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

Sandra Scofield, Chief Developer
Norman K. Hamilton, Director of Curriculum
Development Programs Division

AVAILABILITY

The materials were completed in October 1974, and a search for a publisher will begin shortly. Trial kits will be available from the developer for loan and examination under controlled situations:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 008

PRE-READING SKILLS PROGRAM (PRS)

A program which insures that children will be ready to learn to read when they begin formal reading instruction

The *Pre-Reading Skills Program* (PRS) is an instructional program developed to prepare kindergarten children to learn reading. PRS represents a new approach to reducing reading failure. It is based on the conviction that with proper instruction prior to formal reading, a significant number of reading failures can be avoided. The program does not teach reading; rather, it insures that children will be ready to learn to read when they begin formal reading instruction.

The selection of skills taught in PRS is based on more than 5 years of research on the reading process and on learning to read. To be included in the program, a skill had to meet two basic criteria: A direct relationship to the reading process or to learning to read, and a high correlation with reading success. In addition, a skill was selected if a significant number of children lacked it when entering kindergarten. Five visual and sound skills form the basis of instruction for PRS: Letter order, letter orientation, word detail, sound matching, and sound blending. In addition to these five skills, sound-picture association, letter-sound correspondence, and rhyming are taught in PRS.

The center's research showed that abilities in these prereading skills vary widely within a group of children, thus implying that an individualized program is necessary to meet each child's needs. Individualized instruction is, therefore, a fundamental concept of PRS.

The instructional program to teach the five skills consists of a wide variety of interesting activities. For each skill, the child is guided from simple concrete applications of the skill to more complex and abstract applications. The instructional program includes large-group, small-group, and individual activities. Large-group instruction is used primarily to introduce new concepts and materials. Individual activities, which include take-home games (games that children make in school and keep), are used to reinforce the skills. However, the primary means of instruction in PRS is small-group games. Children are assigned to games according to their individual needs. Small-group games are the instructional focus of PRS not only because they provide a means to individualize instruction, but also because they actively involve a child in learning the skills. Small-group games also give the child valuable social experiences and aid in the development of a positive attitude toward reading.

PRS is easy for a teacher to implement. The sequences of activities to teach the skills are presented in two separate schedules—one for visual skills and one for sound skills. Each activity listed in the schedule is described on a card in the teacher's resource file. PRS teacher's materials are designed to assist a teacher in effectively individualizing instruction. There are a diagnostic test to determine each child's skill needs and a management system to help the teacher keep track of each child's progress.

SUBJECT AREA(S)

Subject areas are reading readiness and prereading skills.

INTENDED USERS AND BENEFICIARIES

PRS was developed as an instructional program for kindergarten children. However, it is also used with older and younger children who need instruction in prereading skills.

Although PRS was designed to be used with English-speaking students, it is currently being used with approximately 275 children whose primary language is Spanish. The developers feel that, with minor adaptations, this program will benefit children in this special target audience. These adaptations are currently being made.

GOAL(S) OR PURPOSE(S)

The goals of PRS are: (1) To teach children the five prereading skills, thus insuring that children have the ability to match letters, letter strings, or printed words, taking into account the orientation and order of the letters and the full configuration of the words; the ability to match words on the basis of constituent sounds and to decide whether a given word contains a particular sound; and the ability to blend sounds into real words using letters as stimuli for the sounds; (2) to accustom children to a reading environment so that they feel comfortable with reading instruction; (3) to acquaint children with the vocabulary used in beginning reading instruction and a variety of books, stories, and other language art materials; and (4) to insure that children acquire a positive attitude toward reading.

PATTERNS OF USE

The instructional activities to teach the five skills are organized into two independent schedules, and for each skill there is an independent unit or sequence of activities. The three units to teach the three visual skills comprise the visual schedule, and two units to teach the two sound skills comprise the sound schedule. Within each visual-skill unit, the lessons are sequential, but the three skill units may be done in a variety of orders. Information for determining the most appropriate order of instruction for the three visual skills is provided in the teacher's guide folders. Within each of the sound-skill units, the lessons are also sequential; but, unlike the visual units, the two sound units must be done in the order in which they appear in the sound schedule.

PRS is an individualized program which children may move through at their own pace. They may skip any of the visual and sound skill units, based on the results of the diagnostic test that is included in the program.

There are many ways to schedule PRS into the daily curriculum. One way is to allot a 20- to 30-minute block of time daily for the lesson. Another way is to allot less time specifically for PRS activities and to integrate selected program activities into different areas of the curriculum. A third way to use the program is to incorporate the activities into a learning-center approach.

PRS is a self-contained instructional system. Each activity listed in the sound and visual schedules is keyed to an activity card which describes the purpose, group size, materials, and procedures for doing the activity. All the materials necessary for the activities are included in the kit.

ASSESSMENT PROVISIONS

PRS uses two types of assessment—formal and informal. Formal skill assessment is done with the skills tests, which consist of individually administered tests for each of the five prereading skills. The skills test booklet contains a single test for each of the skills, a practice test, and an administrator's manual. Each test is a diagnostic criterion-referenced test. A teacher may use the skills test to determine whether children need instruction in a specific skill. The skills tests may also be used to determine whether children need to participate in PRS or whether the children are ready to begin formal reading instruction; if the children master four of the five skills tests, they have the necessary visual and auditory skills to begin reading instruction. Informal assessment is done by evaluating children as they play games, do practice sheets, and learn sound-picture and letter-sound correspondences. Informal assessment of activities shows the children's levels of development for a specific skill and whether the children are succeeding with materials at those levels. An evaluation criterion is provided for each activity. Mastery of an activity is recorded on each of the children's record card.

TIME REQUIREMENTS

The sequences of activities for the sound and visual skills in PRS are given separately so that the teacher has maximum flexibility in incorporating the program into the kindergarten curriculum. Most teachers use PRS 5 days a week, alternating daily between visual and sound activities. Some teachers prefer to use PRS only 3 to 4 days a week, doing a visual activity 1 day and a sound activity the next. Other teachers use PRS 3 days a week and do both a sound and visual activity each day.

Most lessons in PRS are designed to take about 20 minutes a day. However, early in the year, the lessons are shorter to accommodate children's short attention spans, while lessons later in the year may be as long as 30 minutes. The length of time any one child spends daily on PRS activities will depend on the amount of instruction the child requires for mastery of a skill, as well as the organizational methods adopted by the teacher.

IMPLEMENTATION PROCEDURES

Information from the 1974-75 field test of teacher training techniques indicates that a teacher can implement PRS using only the information in the teacher's materials. The teacher's guide folders provide all the information a teacher needs to be able to implement the program, including step-by-step procedures for starting PRS. However, a preservice workshop will aid a teacher in beginning PRS, and it is recommended that a workshop be held if a number of teachers in one area will be using PRS.

Summary Cost Information

One PRS kit containing enough materials for 1 teacher and 60 children (2 kindergarten sessions) can be purchased for $455. The continuation costs of yearly consumable items (record cards, sound-picture cards, and letter-sound cards) is $52.40 for 64 children—which averages less than $0.90 per child. The continuation cost of ditto masters, which are consumable every 2 years, is $20.95.

Personnel Required for Product Adoption and Implementation

A classroom teacher can implement PRS without any special training.

ASSURANCES AND CLAIMS

Assurances

All the PRS materials have been designed to be free of racial, sexual, and other biases and have been submitted to qualified consultants to verify this. During 4 years of field testing, information gathered from teachers has never included reports of possible harm associated with the program.

PRS is self-contained and can be used by teachers with no special training, as evidenced by its current use in 32 States. Most of the teachers using PRS have had no instructional or informational contact with the developers beyond the teacher's guide folders included in the PRS kit. Studies in progress indicate that there is no major difference in implementation between these teachers and teachers who have taken part in an inservice workshop. However, a 1/2-day preservice workshop will decrease the teacher's initial burden in starting the program.

Claims

PRS has a substantial positive effect on children's achievement on prereading skills. In an evaluation study of over 170 children sampled from 43 classes, children who used PRS scored significantly higher than nonusers on 2 types of measures, 1 measure based on the program tests and another based on a standardized reading readiness test. That study also showed that children retain the skills taught in PRS between kindergarten and 1st grade. In addition, PRS was found to be especially effective for children who would not otherwise develop the prereading skills and would, therefore, have difficulty in learning to read.

PRS is enjoyed by children, appreciated by parents, and supported and endorsed by teachers and principals. These attitudes have been reported by teachers in an extensive questionnaire and interview survey. These teachers state that children look forward to the program activities, choosing them during their free playtime. In response to materials the children take home, parents frequently voice their appreciation in being informed about the program and in being given games to play at home with their children. Teachers feel the program is worthwhile, practical to implement, and completely equipped. Principals have commented to center staff that they are pleased with the 1st-grade reading performance of children who have had PRS.

The claims that the prereading skills stressed in PRS are necessary and sufficient for success in reading instruction awaits results of long-range evaluation. Studies have established part of this claim; namely, that few children who are reading successfully at the end of the 1st grade fail to show mastery of these skills. Thus, the prereading skills are logically necessary for reading success.

The research base for the *Pre-Reading Skills Program* is an important factor in its development. Development at the Wisconsin Research and Development Center assures the quality of the initial research studies and of the 4 years of field-test evaluations. The research for the program has been described in 15 reports; most of which have also been published in scholarly journals. The complete developmental history of the program has also been documented and is reported in seven technical reports.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 PRS kit including student and teacher materials	1 kit per kindergarten classroom (1 teacher and 2 sessions of children)	445.00 (subject to change)	Reusable except consumable materials listed below:	
Student materials including games, books manipulatives, record, sound picture cards, and letter sound cards			Sound picture and letter sound cards replaced yearly;	
Teacher materials including schedule book, resource file, diagnostic test, teacher's guide folders, management system (including student record cards), ditto masters, and class charts			student record cards replaced yearly; ditto masters replaced every 2 years	

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wis. 53706

Richard L. Venezky, Director
Susan D. Pittelman, Lead Author
Marga R. Kamm, Lead Author
Ronald C. Leslie, Test Development Specialist and Author

AVAILABILITY

PRS was copyrighted in 1974 by the Board of Regents of the University of Wisconsin System and is currently available from the publisher.

An adaptation of specific PRS materials for Spanish-speaking children is being planned. The estimated date of completion for the preliminary version is September 1976.

An awareness brochure about PRS is available from Encyclopedia Britannica Educational Corporation (EBE). A filmstrip presenting a general overview of PRS is presently being developed by EBE, although it is not yet known whether the filmstrip will be available to the general public. An implementation filmstrip entitled "Small Group Games" has been developed at the Wisconsin Research and Development Center. PRS demonstration sites are presently being identified. For information, contact:

Encyclopedia Britannica Educational Corp.
425 North Michigan Ave., Dept. 10A
Chicago, Ill. 60611

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 009

WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): WORD ATTACK

A program which enables the teacher to focus instruction on specific reading development of students in grades K-6

The *Wisconsin Design for Reading Skill Development* (WDRSD) is an objective-based management system that provides structure and substance for an elementary school reading program, kindergarten through grade 6. It provides the basis for a skill-oriented approach to the teaching of reading and is based on the assumption that mastery of essential subskills will contribute to successful reading performance. To state objectives for reading instruction is to specify what teachers want children to learn. Writing objectives permits teachers to focus instruction for each child and thus to facilitate the child's learning. Focusing skill instruction demands that the teacher know: (1) Which skills are essential, (2) where each child is in the development of skills, and (3) what is available to teach those specific skills.

The word attack element of the design enables the teacher to systematize and focus instruction on the specific reading skills that will help the child decode words independently. Forty-five skills, organized into four levels and described in terms of behavioral objectives, comprise the word attack element. These four levels, A-D, correspond roughly to grade levels K-3.

The word attack components are: (1) A criterion-referenced instrument for each of the skills which allows the teacher to ascertain where each child is in the development of these abilities; (2) a pupil profile card which lists all 45 skills, and serves as the major means of recordkeeping for each individual child; (3) the teacher's resource files which aid the teacher in the organization of instructional materials for each skill (in addition to providing references to previously published commercial materials and providing recommended activities, these files serve as repositories into which materials and activities can be inserted by each teacher).

The materials are designed to assist teachers in their efforts to individualize instruction by focusing on skills. In practice, a teacher determines the appropriate instructional level for each student by administering the criterion-referenced tests. After the test results are recorded on the pupil profile cards, the teacher forms instructional skill groups according to the needs of each child. Then, employing the teaching techniques most suitable for that teacher's personality and abilities as well as for students' individual learning styles, focused skill instruction begins. Following the instructional period, students are assessed with the criterion-referenced mastery test available for each skill; upon mastery of a skill, the pupil cards are used to regroup students for instruction in a new skill.

Thus, individual progress is monitored as students move from skill to skill and from one level to the next as each subsequent level is mastered. Upon completion of all four word attack element skill levels, the student will be able independently to attack phonically or structurally regular words and will recognize all common irregular Dolch list words.

SUBJECT AREA(S)

Reading

Within each level of the word attack element, the skills and objectives are clustered and sequenced into three major types of word decoding strategies: Sight word vocabulary, phonic analysis, and structural analysis. Skills and objectives to develop each of these strategies are presented at each level. In addition to these three major word attack strategies, selected traditional readiness skills are developed at levels A and B.

INTENDED USERS AND BENEFICIARIES

Elementary teachers who work with students in grades K to 3 are the primary users of the word attack element. Although it is assumed that the essential skills in word attack will be introduced to the average child in the early elementary school years, many teachers in grades 4 to 6 have used the materials with their students. Likewise, reading teachers have found that these materials can profitably be used with disabled readers at all age levels.

RD 030 009

GOAL(S) OR PURPOSE(S)

The purpose of this system is to organize instruction to enable children to attack independently phonically and/or structurally regular words and to recognize all common irregular Dolch list words.

PATTERNS OF USE

This instructional system may be used in a multiunit organizational framework or in a traditional self-contained classroom. Word attack may be implemented at any grade level if the teacher feels the child needs the particular skills. The level of instruction of each child is determined by the criterion-referenced tests. Skills are taught sequentially from one level to the next, and a child progresses to the next level only by mastering all skills at the previous level. However, the skills within a level are not arranged in a strict hierarchy so there is flexibility in sequencing instruction. The *Wisconsin Design* provides the skill development aspect of the total reading program, and it can be used in addition to the regular reading program of the school. On the other hand, the design objectives can serve as the basis for the reading program, in which case provision must be made for systematic and extensive application of the skills.

ASSESSMENT PROVISIONS

Thirty-nine of the 45 skills are assessed by the use of criterion-referenced tests which are paper-and-pencil and group administerable with two parallel forms. For the remainder of the skills, a written test is either not appropriate or not definitive. Therefore, guidelines for individual performance tests are provided. Throughout, teachers are encouraged to be aware of informal written and oral observations to assess the child who does not perform well in formal assessment situations.

Assessment procedures include: (1) Break-in testing to determine the instructional level of each student (the first level administered is determined by teacher judgment based on all available information), (2) retesting to find the instructional level of a child who may have been inappropriately tested the first time, (3) posttesting after skill instruction to determine whether the specific skill has been learned to the criterion set locally, and (4) pretesting after completion of skill instruction at one level to determine whether the student has "picked up" any skills at the next higher level.

Break-in testing and retesting are done only once; posttesting and pretesting are repeated as needed, using parallel forms of the tests.

TIME REQUIREMENTS

Skill instruction for 25 minutes per day, approximately 2 hours per week for 2 to 3 weeks, is recommended for each skill not previously mastered. For the average child the program should be completed by the end of the 3d grade if instruction begins at the kindergarten year, level A of the word attack objectives.

IMPLEMENTATION PROCEDURES

Teacher communication, organization, cooperation, and flexibility are required if the word attack element is to be successfully implemented. Teacher inservice time is required at the local level: Prior to implementation, inservice time is necessary to acquaint each teacher with the system and is again important after the teachers have begun implementing the system. Inservice should be provided to help teachers schedule instruction and catalog locally available materials and teacher-developed activities for appropriate skills. Based on the center's model for implementation of IGE and its components, these types of inservices are optionally available through the center or National Computer Systems of Minneapolis, Minnesota. Changes in the physical environment are not required; however, to make the most efficient use of teacher time, teacher cooperation in the sharing of students is most desirable. This requires advance scheduling and planning and flexibility in organization.

MATERIALS AND EQUIPMENT

Although it is desirable to have an extra person available to aid the teacher, the system does not require extra personnel for implementation. If this extra help is provided, special training is not required. However, implementation would be facilitated if these people were to participate in a 3-day workshop. If outside assistance is needed, the publisher/distributor provides special consultants for a fee.

A starter kit which contains sufficient quantities of materials for 4 teachers and up to 175 students, grades K to 3, is available from the publisher/distributor. The cost of this kit is $275. Spirit masters that are needed for the remainder of the year cost $102. Therefore, initial cost for implementation of word attack is approximately $377 for 175 students. The cost per individual student for the first year is $2.15. Beyond this initial year, the continuation cost is $0.57 per individual student.

ASSURANCES AND CLAIMS

Assurances

Over 4,000 schools in 48 States of the United States integrate 1 or more elements of the *Wisconsin Design* into their reading curriculums. There have been no reports that use of the word attack element has had any harmful effects on students or teachers. Every effort has been made to eliminate content which could in any way be interpreted as perpetuating biases relating to religion, age, sex, or socioeconomic status. If a potential user feels any such bias does exist in materials for any skill, the user is encouraged to delete this material and add more pertinent material to the teacher's resource file folder.

Although many users attend a 3-day workshop offered by the publisher/distributor prior to beginning implementation of the design, many others do not. Inservice in each school district is essential for effective implementation, but that inservice can be efficiently accomplished on a completely local level.

Claims

Conceptualization of the word attack element of the *Wisconsin Design* was done with extreme care, proceeding from a study of current practices and relevant reading research to review and evaluation by reading specialists and practitioners. From this emerged sequentially arranged strands of skills. Each strand represented instructionally important, consensually validated skills which were then stated as measurable and instructable behavioral objectives. The quality of the conceptualization of the *Wisconsin Design* has been confirmed by an independent panel of experts.

All materials developed in the word attack element were prepared and reviewed by highly trained specialists in curriculum, measurement, and evaluation. Development of the tests and instructional materials followed the center's established model of empirical tryouts, pilot tests, and field tests over a period of 5 years. Appropriate revisions were made. The commercial version reflects the program alterations dictated by logical and empirical validation techniques. Commercial publication was not authorized until the project and evaluation staff members were convinced that the program was of the highest quality. An independent comparative study has confirmed this judgment.

Field tests conducted by the center and studies conducted by other educational agencies confirm that both urban and nonurban students in several sections of the country who are instructed with the design word attack are able to master the program objectives at acceptable criterion levels. Students who are instructed in the program perform better on program objectives than students who are not. Year-to-year school-wide improvements in skill acquisition occur in schools implementing the program. Furthermore, students who complete the word attack element perform substantially better on the terminal objective than students at the same level who have not completed the program.

Although norm-referenced test results are of lesser concern to the design that attainment of program objectives, field tests conducted by the center have shown that urban and nonurban students who are instructed in the program perform on relevant standardized measures as well as or better than students in the same school performed prior to implementation of the program.

The center conducted two field tests which indicated that the element can be effectively implemented in a wide range of elementary schools without substantial assistance from the developers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Tests, levels A-D	1 per child plus extras for retesting	Available only in package of 35; tests individually range .25-.56	Consumable with each use	
Spirit masters	1 set per school	102.00	Consumable yearly	
Pupil profile cards	1 per child	Available only in package of 100; individual card, .07	Reusable throughout program	
Rationale and Guidelines	1 per school	5.00	Reusable	
Test administrator's manuals, levels A-D	1 per level for each 35 students at that level	1.00 per level	Reusable	
Teacher's Planning Guide: Word Attack	1 per teacher	3.00	Reusable	
Teacher's Resource File: Word Attack	1 per 3-4 teachers	20.00	Reusable	
Teacher's Resource File: Word Attack, Supplement No. 1	1 per 3-4 teachers	12.50	Reusable	
Card notcher	1 per 2 teachers	10.00	Reusable	
Card skewer	1 per 3-4 teachers	1.25	Reusable	

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wisc.

Wayne Otto, Principal Investigator

AVAILABILITY

The *Wisconsin Design for Reading Skill Development: Word Attack* element was copyrighted in 1972 by the Board of Regents of the University of Wisconsin System for the Wisconsin Research and Development Center for Cognitive Learning. This copyright is claimed until 1980. The word attack materials are available from:

National Computer Systems/Educational Systems Division
4401 West 76th St.
Minneapolis, Minn. 55435

A specimen set which provides a sample of the various components of word attack is available from NCS/Educational Systems Division at a cost of $5. A series of 12 filmstrips, each dealing with a specific topic of introduction to the *Wisconsin Design*, may be purchased from NCS for $100. NCS offers free 1/2-day orientation sessions to acquaint interested individuals with the rudiments of the *Wisconsin Design*.

More comprehensive information can be acquired by attending a 3-day implementation workshop. These workshops are designed to train key school district personnel who in turn will offer inservice sessions for teachers in their own community. The cost of such a workshop is $95. In addition to the instruction, participants receive some design materials.

INFORMATION CURRENT AS OF MARCH 1975 ■

WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): STUDY SKILLS

Behavioral objectives that a child must master to read maps, graphs, and tables

The Wisconsin Design for Reading Skill Development (WDRSD) is an objective-based management system that provides structure and substance for an elementary school reading program, kindergarten through grade 6. It provides the basis for a skill-oriented approach to the teaching of reading and is based on the assumption that mastery of essential subskills will contribute to successful reading performance. To state objectives for reading instruction is to specify what teachers want children to learn. Writing objectives permits teachers to focus instruction for each child and thus to facilitate children's learning. Focusing skill instruction demands that the teacher know which skills are essential, where each child is in skill development and what is available to teach those specific skills.

The study skills element of the WDRSD is composed of 71 skills organized into 7 levels and described in terms of behavioral objectives which specify for the teacher the essential skills a child must master in order to competently read maps, graphs, and tables, and to efficiently use reference sources.

Study skills components include: 1. A criterion-referenced instrument for each skill allows the teacher to ascertain where each child, grades K-6, is in the development of these abilities; (2) a unique recordkeeping system—pupil profile cards—allows the teacher to monitor each child's skill development; and (3) a teacher's resource file folder for each skill organizes available materials, some of which are references to previously published commercial materials, others of which are recommended teacher activities, that allow for focused skill instruction.

The teacher first administers the criterion-referenced tests for the skills according to the appropriate levels of the students. After the test results are recorded on the pupil profile cards, the teacher forms instructional skill groups according to the established developmental needs of each child. Specific, focused skill instruction then begins, employing the teaching techniques most suitable for that teacher's personality, abilities, and competencies.

Instruction for the subskills of the study skills element begins at the individual's level with continuous progress dependent upon the student's capacity to master skills. With completion of the highest level of study skills, the child should have attained mastery of the terminal, or broad, objective of the study skills element.

SUBJECT AREA(S)

Reading, social studies, mathematics and language arts.

The Study Skills element of the *Wisconsin Design for Reading Skill Development* is divided into three broad areas: Maps, graphs and tables, and reference skills. Each of these areas is further subdivided to enable teachers to focus instruction properly on each of the subskills. The subskills for developing mapreading abilities are those identified specifically for understanding the principles of representation, orientation, and measurement. The progression of subskills for graph and table reading includes direct extraction of information, comparisons, interpolations, projections, and problem solving. Reference subskills include those which center on utilization, location, organization, and evaluation of a variety of resource materials.

INTENDED USERS AND BENEFICIARIES

Elementary school teachers who work with children of all abilities in grades K-6 are the primary users of the study skills element of the *Wisconsin Design.* Although designed for use in the elementary school, the study skills objectives have been used and are being used by junior high teachers as well. There have been no formal field tests of implementation at the postelementary-school level.

GOAL(S) OR PURPOSE(S)

The purpose of this system is to organize instruction which will enable the child to learn: (1) To derive information from maps, graphs, and tables; (2) to competently use standard reference sources; and (3) to independently locate and make use of information from several types of sources.

PATTERNS OF USE

This K-6 instructional system may be used in a multiunit organizational framework or a traditional self-contained classroom. The student may begin using the program at any grade level with criterion-referenced assessment determining the instructional level. Skills are taught sequentially from one level to the next, and a child progresses to the next level only by mastering all skills at the previous level. However, the skills within a level are not arranged in a strict hierarchy, so there is flexibility in sequencing instruction. It is possible to implement the Study Skills instruction during the time of the school day set aside for reading instruction. Owing to the diverse nature of the skills, however, some teachers prefer to teach map skills during the social studies time allotment, graphs and tables in the mathematics time segment, and reference skills during the language arts period. The skills for any of the three areas of the Study Skills can be used as an instructional base or as an instructional monitor depending upon the specific school situation. In general, published materials already available in the school are sufficient to instruct for any one particular skill. The focusing of instruction on that one skill allows more efficient use of those materials.

ASSESSMENT PROVISIONS

Each of the 71 skills in the program is assessed by the use of a criterion-referenced test. For most skills, a paper-and-pencil, group-administerable test is available. For many skills, two parallel forms exist for each skill. For some skills, a formal, written test would not be appropriate; thus guidelines for individually assessed performance are provided. Throughout, teachers are encouraged to be aware of informal written and oral observations to assess the child who does not perform well in formal assessment situations. The assessment procedures include: (1) Break-in testing to determine the instructional level of the student (the first test level administered is determined by teacher judgment based on all available information), (2) retesting to find the instructional level of the students inappropriately tested previously, (3) posttesting after instruction to determine whether the skill has been mastered at the level selected locally (80 percent is recommended), and (4) pretesting after completion of skill instruction at one level to determine whether the student has "picked up" any skills at the next higher level. Break-in testing and retesting are done only once; posttesting and pretesting are repeated periodically as needed, using parallel forms when available.

TIME REQUIREMENTS

Skill instruction for 25 minutes per day, approximately 2 hours per week for 2 to 3 weeks, is recommended for each skill not previously mastered. The length of time needed for an individual to complete all of the study skills objectives is determined by: (1) The instructional level at entry, (2) the individual learning capacity of each child, and (3) whether instruction is properly focused. For the average child, if instruction begins at the kindergarten year with level A of the study skills objectives, the program should be completed by the end of grade 6.

IMPLEMENTATION PROCEDURES

Teacher communication, organization, cooperation, and flexibility are required if the study skills element is to be successfully implemented. Teacher inservice training is mandatory. Prior to implementation, inservice time is necessary to fully acquaint the teacher with the system. Once the program is implemented, inservice time is necessary to schedule instruction and to become familiar with, and properly catalog to the appropriate skill, all locally available published materials and all locally developed teacher activities.

No changes need be made in the physical environment of the school. To make the most efficient use of teacher time, however, teacher cooperation in the sharing of students is most desirable. This requires advance scheduling and flexibility in organization.

Following the Wisconsin R & D Center model for implementation of IGE and its components, these inservices are optionally available from the Wisconsin R & D Center or National Computer Systems, Minneapolis, Minnesota.

Summary Cost Information

The publisher/distributor has made available a Starter Kit which contains sufficient quantities of materials for 6 teachers and up to 245 students, grades K-6. The Starter Kit costs $396. Spirit masters, for use throughout the remainder of the year, amount to $96. The total amount is $492, or about $2 per child.

Beyond the initial year, the continuation cost per individual student for the same size school would be approximately $0.45 per pupil.

Personnel Required for Adoption and Implementation

This program may be adopted without additional personnel; however, it is desirable to appoint one person to coordinate the implementation efforts. This person can direct the implementation without training, but implementation is facilitated by attendance at a 3-day workshop. Consultants are available through the publisher/distributor at quotable rates.

ASSURANCES AND CLAIMS

Assurances

One or more elements of the *Wisconsin Design* are used with more than 1,250,000 children in over 4,000 schools in 48 States. The developers and publishers have not received reports of harmful effects resulting from the use of the study skills element or any other element of the design.

Every effort has been made to eliminate content which could, in any way, be interpreted as perpetuating biases relating to religion, age, sex, or socioeconomic status. If a potential user feels any such bias does exist for any skill, that user's own materials can and should be added to the teacher's resource file folder for that skill.

Although many users attend a 3-day workshop offered by the publisher/distributor prior to beginning implementation of the design, many other users do not. Inservice in each school district is essential for effective implementation, but inservice can be efficiently accomplished on a completely local level.

Claims

1. Conceptualization of the study skills element of the *Wisconsin Design* was done with extreme care, proceeding from a study of current practices and relevant reading research to review and evaluation by reading specialists and practitioners. From this product emerged sequentially arranged strands of skills. Each strand represented instructionally important, consensually validated skills which were then stated as measurable and instructable behavioral objectives. The quality of the conceptualization of the Wisconsin Design has been confirmed by an independent panel of recognized experts.

2. All materials developed in the study skills element were prepared and reviewed by highly trained specialists in curriculum, measurement, and evaluation. Development of the tests and instructional materials followed the Wisconsin R & D Center's established model of empirical tryouts, pilot tests, and field tests over a period of 4 years. Revisions were made when data indications required them. The commercial version reflects the program alterations dictated by logical and empirical validation techniques. Commercial publication was not authorized until the design project and R & D Center evaluation staff members were convinced that the program was of the highest quality. An independent comparative study has confirmed this judgment.

3. Since the *Wisconsin Design* is a criterion-referenced system of consensually validated skills, the major evaluation question to be answered is whether the program is able to meet its own objectives. Field tests conducted by the R & D Center confirm that both urban and nonurban students in several sections of the country who are instructed with Wisconsin Design Study Skills are able to master the program objectives at acceptable criterion levels. Students who are instructed in the program perform better on program objectives than students who are not instructed in the program. Further, year-to-year, schoolwide improvements in skill acquisition occur in schools implementing the program.

4. Although norm-referenced test results are of lesser concern to the design than attainment of program objectives, field tests conducted by the R & D Center have shown that urban and nonurban students who are instructed in the program perform on relevant standardized measures as well as, or better than, students in the same school prior to implementation of the program.

5. Being a tightly designed, complex reading management system, a critical question is whether the design can be implemented in schools without substantial assistance from the developers. The Research and Development Center conducted two field tests to ascertain whether such implementation is possible. Evidence indicates that the element can be effectively implemented in a wide range of elementary schools without the presence of Research and Development Center staff. It should be noted that this program has been enthusiastically accepted by teachers and administrators.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Tests, levels A-D	1 per child plus extras for retesting	Available only in package of 35; tests individually range .25-.77	Consumable each time unit is used	
Tests, levels E-G	1 per child plus extras for retesting	Available only in package of 35; tests individually range 1.37-1.71	Reusable	
Answer sheets, tests, levels E-G	1 per child plus extras for retesting	Available only in package of 100; individual sheet .11	Consumable each time unit is used	
Spirit masters for retesting, all levels	1 set per school	96.00 total for set	Consumable yearly	
Pupil profile cards	1 per child	Available only in package of 100; individual card .07	Usable throughout program	
Rationale and Guidelines	1 per school	5.00	Reusable	
Test administrator's manuals, levels A-G	1 per level for each 35 students at that level	1.00 per level	Reusable	
Teacher's planning guide: Study skills	1 per teacher	3.00	Reusable	
Teacher's resource file: Study skills	1 per 3-4 teachers	26.00	Reusable	
Card notcher	1 per 2 teachers	10.00	Reusable	
Card skewer	1 per 3-4 teachers	1.25	Reusable	

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wis.

Wayne Otto, Principal Investigator

AVAILABILITY

The study skills element was copyrighted in 1973 by the Board of Regents of the University of Wisconsin System for the Wisconsin Research and Development Center for Cognitive Learning. This copyright is claimed until 1980. The materials are available from:

National Computer Systems/Educational Systems Division
4401 West 76th St.
Minneapolis, Minn. 55435

RD 030 011

WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): SELF-DIRECTED, INTERPRETIVE AND CREATIVE READING

The basis for a skill-oriented approach to the teaching of reading in grades K-6

The *Wisconsin Design for Reading Skill Development* (WDRSD) is an objective-based management system that provides structure and substance for an elementary school reading program, kindergarten through grade 6. It provides the basis for a skill-oriented approach to the teaching of reading and is based on the assumption that mastery of essential subskills will contribute to successful reading performance. To state objectives for reading instruction is to specify what teachers want children to learn. Writing objectives permits teachers to focus instruction for each child and thus to facilitate the child's learning.

Six areas of essential skills have been identified in the design: Word attack, comprehension, and study skills; and self-directed, interpretive, and creative reading skills. The self-directed, interpretive, and creative reading areas differ from the first three in that the objectives for these skills are expressive or descriptive, as opposed to being behavioral or prescriptive.

The components of the program are designed to be used by the teacher. They include: (1) Teacher's planning guide—contains the expressive objectives and overview for each element, an explanation of the components, and suggestions for possible methods or implementation; (2) pupil profile card—used for monthly or yearly recording of the number of exposures for each pupil with regard to each skill; (3) wall chart—used to record daily or weekly exposures for each child in the classroom with regard to each element; and (4) teacher's resource file—48 folders, each of which contains activity suggestions for teachers to use in exposing pupils to the skills. There is one folder for each skill at each level. There are three levels; and at each one there are five skills in self-directed reading, six in interpretive reading, and five in creative reading.

In order to implement the program, a teacher identifies an appropriate time during the day (e.g., language arts class) when one or more pupils may focus on a skill. The teacher selects the skills by checking a wall chart to determine the area of skills to which each child has had the least exposure. The teacher then consults the teacher's resource files, selects one or more appropriate activity suggestions, gathers or makes any suitable materials, and presents the lesson to the child or group of children. Some activities may be performed independently by the student. After the activity is completed, the exposure is recorded on the classroom wall chart. At the end of the month or year, pupils' recordings for all the skills are transferred to their individual profile cards.

SUBJECT AREA(S)

Self-Directed, interpretive, and creative reading

Subject areas include: Selecting books automatically, reading rate and purpose, following directions, self-direction, library use; writer's purpose, fact or fiction, character traits, emotional reactions, imagery, figurative language, story outcomes; and dramatization, oral/musical interpretations, personal narrative, written expression, and visual expression.

INTENDED USERS AND BENEFICIARIES

The product is designed to be used by all elementary school children. There are activity suggestions at each of three levels which pertain to children at a certain age/grade: the A to C activities are appropriate for grades K to 2; the D to E are for grades 3 and 4; and F to G, for grades 5 and 6. The developers feel, however, that the skills at levels F to G are also appropriate for junior high pupils, and the activities for that level would need only minimal adaptation for use with 12- to 14-year-old.

GOAL(S) OR PURPOSE(S)

The purposes of the *Self-Directed, Interpretive, and Creative Reading* are: (1) To provide a basis for a skill oriented approach to the teaching of expressive objectives; (2) to help teachers systematize and focus their instruction; (3) to help students focus on their learning tasks; (4) to provide both the teacher and student with an invitation to explore issues of particular interest to them; and (5) to permit a focus on all of the important aspects of reading instruction for which there are intended, yet unassessable, results.

RD 030 011

PATTERNS OF USE

This K-6 instructional program may be used in a multiunit organizational framework or a traditional self-contained classroom. In *Self-Directed, Interpretive, and Creative Reading* the developers recommend that each child be exposed to every skill (at the child's level) a minimum of three times per year. For example, a child in 2d grade would be exposed three times each to the five skills in self-directed reading at levels A to C, the six skills in interpretive reading at levels A to C, and the five skills in creative reading at levels A to C. There is no sequencing of skills or of activity suggestions either among the three elements or within any one element. The produce may be used as a specific focus for a language arts class or as a supplement for students not currently involved in instructional groups for basic skills such as word attack.

ASSESSMENT PROVISIONS

No assessment instruments were developed for *Self-Directed, Interpretive, and Creative Reading*. Expressive objectives merely describe a behavior as opposed to prescribing it. The results are not expressed in common objectives since they are related to each individual's own abilities. No screening or placement is necessary in implementing the program since all pupils are exposed to the same skills, but they work according to their own capacity.

TIME REQUIREMENTS

Self-Directed, Interpretive, and Creative Reading is designed to be used from the beginning of kindergarten through grade 6. The child is exposed 3 times to each of 16 skills during each year of school. An exposure consists of a child doing an activity that provides an opportunity to practice a skill (e.g., predict an outcome of a story). These activities may vary in length from 5 minutes to 1 hour. Because of such diversity, and because many activities can be done independently by the student, specifying a total time in terms of numbers of hours would have little meaning.

IMPLEMENTATION PROCEDURES

Implementation may be carried out by the classroom teacher, intern, aide, or librarian. Communication among all staff members is important in an individualized program since scheduling of skill times and locations, students, and preparation time is important. The program works most effectively if the staff shares ideas and experiences regarding the skills. Although the areas of this product are included in the implementation workshops for the *Wisconsin Design* and a general understanding of the design is highly desirable for implementation, the program can easily be installed without attending these workshops.

MATERIALS AND EQUIPMENT

Total product installation, on the basis of a 1:25-30 teacher-to-pupil ratio in an elementary school of 600, would approximate $0.47 per pupil. Successive annual costs would approximate $50, or $0.08 per pupil.

ASSURANCES AND CLAIMS

Assurances

The information gathered from the field test of the materials which involved 1,500 pupils in 3 schools indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented without additional aid beyond that given in the teacher's planning guide. The developers and publishers have not received any reports of harm associated with the use of this product.

Activity suggestions in the teacher's resource file have been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the folders would cause an appropriately directed review of the materials by a qualified person from outside of the program. The materials are revised to eliminate such shortcomings.

Claims

Conceptualization of the *Self-Directed, Interpretive, and Creative Reading* element of the *Wisconsin Design* was done with extreme care, proceeding from a study of current practices and relevant reading research to review and evaluation by reading specialists and practitioners. From this emerged sequentially arranged strands of skills. Each strand represented instructionally important, consensually validated skills which were then stated as measurable and instructable behavioral objectives. The quality of the conceptualization of the *Wisconsin Design* has been confirmed by an independent panel of experts.

All materials developed in the *Self-Directed, Interpretive, and Creative Reading* elements were prepared and reviewed by highly trained specialists in curriculum, measurement, and evaluation. Development of the tests and instructional materials followed the center's established model of empirical tryouts, pilot tests, and field tests over a period of 5 years. Revisions were made when data indicated that they were required. The commercial version reflects the program alterations dictated by logical and empirical validation techniques. Commercial publication was not authorized until the project and evaluation staff members were convinced that the program was of the highest quality. An independent comparative study has confirmed this judgment.

The center conducted a pilot study which determined that this program can be implemented without assistance from the developers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil profile card	1 per child	7.00 per package* of 100	Usable throughout program	
Teacher's planning guide	1 per teacher	2.00	Reusable	
Teacher's resource file	1 per 4 teachers	28.50	Reusable	
Wall chart	1 per teacher	2.00	Consumable yearly	

*Price subject to change.

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wisc.

Wayne Otto, Principal Investigator

AVAILABILITY

Self-Directed, Interpretive, and Creative Reading was copyrighted in 1975, and copyright is claimed until 1980. It is currently available from the publisher/distributor:

NCS Educational Systems Division
4401 West 76th St.
Minneapolis, Minn. 55435

Information on the availability of filmstrips, free orientation sessions, and 3-day training workshops may be obtained from NCS. Inservice workshops are optional if this product is used independently of the other elements in the Wisconsin Design.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 012

THE SPELLING PROOF PROGRAM (SPRUF)

A program that requires the student to choose the correctly spelled work from a set to complete an analogy or a sentence

The Spelling Proof Program (SPRUF) is a computer-assisted spelling program that requires the student to choose the correctly spelled word from a set of distractors to complete an analogy or a sentence. The distractors used in the program are frequent misspellings of the target word (based on errors found in paper-and-pencil tests), homophones, and misspellings containing plausible phonetic alternatives. Practice is also provided in the selection of homophones appropriate to semantic contexts. The student selects the correct spelling and is provided immediate feedback. Incorrect items are saved and presented again later in the instructional session. Students work in the program until every item has been answered correctly once.

There is a total of 17 SPRUF lessons that can be used as stand-alone instructional resources. They provide computer-assisted instruction for certain units of the off-line Kottmeyer and Ware spelling curriculum, but could be coordinated with other textbook series as well. Teachers assign the program by writing the appropriate lesson name on a flowchart which contains directions to the student for entering and using the program. When the student completes the program, a percentage score is given, and the student writes this score on the back of the flowchart. The percentage score reflects the student performance level in the program and is used to provide feedback to the classroom teacher.

SPRUF can be used either independently or with any or all of the other learning resources available in the Computer Assisted Elementary Spelling Program. These are: SPLPAT, which teaches alternative spellings for the same sound; DPSPEL, which provides practice in spelling root words and adding prefixes and suffixes; and TRYSPL, which permits students to generate multiple spellings and select the one that "looks" correct.

SUBJECT AREA(S)

The subject area is basic spelling skills, specifically, homophones.

INTENDED USERS AND BENEFICIARIES

The prime users include elementary school students (grades 2-6) and junior high students in remedial reading and spelling.

GOAL(S) OR PURPOSE(S)

A child successfully completing this program is expected to be able to select the correct spelling for the appropriate semantic context and to be able to select the correct spelling from a set of plausible alternative spellings for the same sound.

PATTERNS OF USE

Teachers assign the program when the child reaches a target unit contained in the textbook spelling program. The child then works individually at a computer terminal until a lesson is completed; that is, until every item in the lesson is answered correctly once.

The program can be used to supplement any elementary school spelling curriculum and contains words of appropriate difficulty for children in grades 2-6. Patterns of use depend on teachers' chosen methods of implementation and on individual student spelling proficiency.

ASSESSMENT PROVISIONS

The program provides for pretesting and posttesting to assess spelling mastery. A child's first pass through the items in the computer-assisted program serves as a pretest, or teachers can assign the program when a child has failed to demonstrate mastery on an offline cassette-led pretest. Upon completion of the program, the child takes an off-line cassette-led posttest. A percentage score reflecting the student's levels of performance is fed back to the teacher through the record on the back of the student flowcharts.

TIME REQUIREMENTS

An average lesson takes about 20 minutes. With 17 lessons, 5.3 instruction hours are typically required to complete the entire program. Students usually complete a lesson in one session at the terminal.

IMPLEMENTATION PROCEDURES

To use SPRUF, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype-compatible cathode-ray tube (CRT) and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. A month of expert programing would be required to adapt the program to local time-sharing systems.

Teacher orientation requires approximately 15 minutes, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performing within the program. Students work individually on the program, so any school organization that allows for students to work at their own pace on different objectives within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

Assurances

During 2 years of operation in a school setting, no observations were made of harm to students as a result of using the program. Students are treated uniformly, regardless of race or sex. The content of the program is sentences and words, and there are no sex, racial, age, socioeconomic, or religious biases.

At the field-test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites once an initial implementation plan is devised.

Claims

Many children who did not demonstrate mastery on a pretest of a selected homophone unit were able to demonstrate mastery on a posttest after receiving practice on SPRUF. The number of children demonstrating mastery after SPRUF was identical to the number receiving an off-line paper-and-pencil prescription on the unit.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student flowcharts	17 per student	.10	Consumable yearly	
Teacher resource sheet	1 per teacher	1.00	Reusable	
Computer program	1 per computer system	Cost of duplication	Reusable	

Note: The required computer hardware, software, and time-sharing systems necessary to implement the program in a school are described under "Implementation Procedures." Implementation of this program requires either a consultant or school district personnel to plan its use in the context of a classroom spelling program. Assistance in planning for implementation is available from the developer.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Karen K. Block, Project Director
Dorothea P. Simon, Senior Research Assistant

AVAILABILITY

Copyright is pending. SPRUF is currently available from:
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 013

THE DRILL AND PRACTICE SPELLING PROGRAM (DPSPEL) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM)

A program that provides practice in spelling root words and adding prefixes and suffixes

The Drill and Practice Spelling Program (DPSPEL) is a computer-assisted spelling program that provides practice in spelling root words and adding prefixes and suffixes. Lessons are of two general types: Application of structural rules, which includes forming and adding regular noun plurals or verb past tense or third singular; and vocabulary building lesson, where the affixed form must be discovered through sentence clues and then spelled.

To elicit a word to be spelled, the computer console displays a sentence such as "Make the -ing form of trap." The root word is highlighted by asterisks. The child spells the affixed form—"trapping"—and is given immediate feedback on the correctness of the spelling. Misspelled words are presented again for more practice, and the lesson ends when the child has typed a correct spelling for each word. Practice is provided in both directions, from root to derived form and vice versa.

The lessons are coordinated with the offline individualized Kottmeyer and Ware spelling curriculum. Computer-assisted instruction is available for 18 of the textbook units. Teachers assign the program by writing the appropriate lesson name on a student flowchart that contains directions to the student for entering and using the program. Student completion of the program is indicated on the back of the flowchart, which the student returns to the teacher.

DPSPEL can be used independently or with one or all of the other learning resources in the Computer Assisted Elementary Spelling Program. These are: SPRUF, which teaches children to select the correct spelling from a set of similar but incorrectly spelled words; SPLPAT, which teaches alternative spellings for the same sound; and TRYSPL, which teaches children to generate alternative spellings and select the one that "looks" right.

SUBJECT AREA(S)

The subject area is basic spelling skills; specifically, structural and lexical spelling rules.

INTENDED USERS AND BENEFICIARIES

The prime users include elementary school students (grades 2-6) and junior high students in remedial reading and spelling.

GOAL(S) OR PURPOSE(S)

Children using DPSPEL successfully are expected to be able to spell a root word and its affixed form correctly.

PATTERNS OF USE

Students may be assigned this program when they reach units in the textbook series for which computer-assisted instruction is available. They work individually at a computer terminal until a lesson is completed; that is, until every item in the lesson is answered correctly once. In addition, individual words within the program can be accessed for concentrated practice.

The program can be used to supplement any elementary school spelling curriculum and contains words of appropriate difficulty for children in grades 2-6. Patterns of use depend on teachers' chosen methods of implementation and on individual student spelling proficiency.

ASSESSMENT PROVISIONS

The program contains its own pretest. An offline cassette-led posttest can be used, or the pretest routine can be reaccessed to assess mastery.

TIME REQUIREMENTS

An average lesson takes 33 minutes. With 18 lessons, there is typically a total of 10 hours of instruction.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype compatible cathode-ray tube (CRT) and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. A month of expert programing would be required to adapt the program to local time-sharing systems.

Teacher orientation requires approximately 1/2 hour, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performing within the program. Students work individually on the program, so any school organization that allows students to work at their own pace on different objectives within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

During 2 years of operation in a school setting, no observations were made of harm to students as a result of using the program. Students are treated uniformly, regardless of race or sex. The content of the program is sentences and words, and there are no sex, racial, age, socioeconomic, or religious biases.

The program is in its third year of use at the Oakleaf School. Teachers continue to use it regularly as children place in the target units. At this field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student flowcharts	18 per student	.10	Consumable yearly	
Teacher resource sheet	1 per teacher	1.00	Reusable	
Computer program	1 per computer system	Cost of duplication	Reusable	

Note: The required computer hardware, software, and time-sharing systems necessary to implement the program in a school are described under "Implementation Procedures." Implementation of this program requires either a consultant or school district personnel to plan its use in the context of a classroom spelling program. Assistance in planning for implementation is available from the developer.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Karen K. Block, Project Director

AVAILABILITY

Copyright is pending. DPSPEL is currently available from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 014

THE TRY SPELLINGS PROGRAM (TRYSPL) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM)

A program that allows children to generate multiple spellings for a word they wish to spell and then choose one that looks correct

The Try Spellings Program (TRYSPL) is a computer-assisted spelling program that permits children to generate multiple spellings for a word they wish to spell, then choose the one that "looks" correct. Immediate feedback is provided, and the correct spelling of the word is printed. It is designed for use in grades 2-6 as an important component of off-line spelling curriculum. There are 19 different TRYSPL lessons, each containing an average of 16 words.

The program was suggested by the Simon and Simon theory of spelling performance, which holds that spelling is in part a generate-and-test-process, i.e., alternative spellings of a word are generated and compared with visually encoded information used to recognize words in reading. The program is designed to provide practice in the second stage of spelling performance, the visual evaluation stage.

Teachers use TRYSPL in conjunction with various units of standard offline spelling curriculums or in tandem with SPLPAT, which teaches alternative spellings for selected phonemes. Teachers assign the program by writing the appropriate lesson name on a student flowchart which contains directions to the student for entering and using the program. When the student completes the program, a percentage score is given, and the student writes his score on the back of the flowchart. The percentage score reflects the student performance level in the program and is used to provide feedback to the classroom teacher.

TRYSPL may be used independently, with SPLPAT, or with any of the other learning resources available in the computer assisted elementary spelling program. These are: SPRUF, which teaches children to select the correct spelling from a set of similar but incorrectly spelled words; and DPSPEL, which provides practice in spelling root words and adding prefixes and suffixes.

SUBJECT AREA(S)

The subject areas are basic spelling skills; specifically, generating and testing alternative spellings.

INTENDED USERS AND BENEFICIARIES

The prime users include elementary school students (grades 2-6) and junior high students in remedial reading and spelling.

GOAL(S) OR PURPOSE(S)

Students using TRYSPL are given practice which enables them: (1) To manage spelling processes effectively, e.g., to generate and test when needed; (2) to learn that visual recognition information can be used to supplement recall in spelling; and (3) to apply information about plausible phonetic alternatives to the generation of alternative spellings.

PATTERNS OF USE

The lessons are arranged to be used as followup activities to SPLPAT (which teaches alternative spellings for sounds). Since the lessons were initially designed to follow instruction in phoneme-to-alternative-grapheme mapping, the words in TRYSPL contain the specific sounds taught in SPLPAT. Most lessons contain words of a level of reading difficulty appropriate to grades 4 and above.

The program need not be used exclusively in conjunction with SPLPAT. In fact, teachers generally prefer to use the two programs independently, prescribing them on the basis of perceived learner needs.

The program can be used to supplement standard elementary school spelling curriculums or as a stand-alone program for practice in generation and selection of correct spellings.

ASSESSMENT PROVISIONS

There are no pretests for this program. Teachers are free to use it according to their own assessment of student needs. Percentage scores reflecting the students' levels of correct responding are fed back to the classroom teacher through the student flowcharts to aid the teacher in this evaluative and prescriptive process.

TIME REQUIREMENTS

An average lesson takes about 40 minutes. With 19 lessons, approximately 13 hours are typically required to complete the entire program.

The lessons are often used on an assigned-time basis. Students work on a lesson for about 20 minutes, stop, and return to the program in the next few days. The computer automatically enters the student at the point at which the last session was terminated. The style of use depends upon individual teachers.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype-compatible cathode-ray tube (CRT) and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. A month of expert programing would be required to adapt the program to most local time-sharing systems.

Teacher orientation requires approximately 1/2 hour, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performing within the program. Students work individually on the program, so any school organization that allows students to work at their own pace on different objectives within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

Assurances

During 2 years of operation in a school setting, no observations were made of harm to students as a result of the program. Students are treated uniformly, regardless of race or sex. The content of the program is sentences and words, and there are no sex, racial, age, socioeconomic, or religious biases.

At the field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

Claims

TRYSPL appears to have practical utility in spelling. Some children can increase their scores by generating several spellings and choosing among them rather than accepting their single first-produced spelling. Gains of up to 13 percent in spelling test scores are attributable to use of the program. There are, however, differences in the effectiveness of this procedure among individual children.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student flowcharts	19 per student	.10	Consumable yearly	
Student worksheets	19 per student	.10	Consumable yearly	
Teacher resource sheet	1 per teacher	1.00	Reusable	
Computer program	1 per computer system	Cost of duplication	Reusable	

Note: The required computer hardware, software, and time-sharing systems necessary to implement the program in a school are described under "Implementation Procedures." Implementation of this program requires either a consultant or school district personnel to plan its use in the context of a classroom spelling program. Assistance in planning for implementation is available from the developer.

DEVELOPER/AUTHOR:

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Karen K. Block, Project Director

AVAILABILITY

Copyright is pending. TRYSPL is currently available from:

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Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 015

THE SPELLING PATTERNS PROGRAM (SPLPAT) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM)

A program teaching the concept that a target sound can be spelled by alternative letters or graphemes

The Spelling Patterns Program (SPLPAT) is a computer-assisted spelling program which teaches the concept that a target sound or phoneme (e.g., /K/) can be spelled by alternative letters or graphemes (/K/, /CK/, /C/). It is designed for use in grades 2-6 as an important component of standard off-line spelling curriculum. There are 16 different lessons that teach 21 different phoneme-to-alternative-grapheme mappings. The program has been used in two ways—as prerequisite instruction prior to practice in generating alternative spellings provided by another computer-assisted spelling program (TRYSPL) or as remedial instruction for poorer spellers who require review and maintenance instruction in basic spelling generalizations.

The program was suggested by the Simon and Simon theory of spelling performance, which holds that spelling is in part a generate-and-test process, e.g., alternative spellings of a word are generated and compared with visually encoded information used to recognize words in reading. The program is designed to teach the first stage of spelling performance, the generation stage.

The teaching strategy is that of guided discovery and is implemented by the finding-counting-sorting teaching routines: (1) Finding words with a target phoneme out of a larger set of words, (2) counting the number of different spelling patterns that represent the sound in the sample of words, and (3) sorting the sample of words into a columnar array according to the spelling patterns they contain. These instructional routines are generalizable and can be applied to teach other kinds of content. As with all computer-assisted programs, there is immediate feedback and branching appropriate to the nature of the student's answer.

SPLPAT lessons can be coordinated with standard off-line individualized spelling curriculums. Teachers assign the program by writing the appropriate lesson name on a student flowchart which contains directions to the student for entering and using the program. When the student completes the program, a percentage score is given, and the student writes this score on the back of the flowchart. The percentage score reflects the student performance level in the program and is used to provide feedback to the classroom teacher.

SPLPAT can be used independently or with one or all of the other learning resources in the computer assisted elemtnary spelling program. These are: SPRUF, which teaches children to select the correct spelling from a set of similar but incorrectly spelled words; DPSPEL, which provides practice in spelling root words and adding prefixes and suffixes; and TRYSPL, which permits students to generate multiple spellings and select the one that "looks" correct.

SUBJECT AREA(S)

The subject area is basic spelling skills, specifically, mapping sounds to spelling patterns.

INTENDED USERS AND BENEFICIARIES

The prime users include elementary school students (grades 2-6) and junior high students in remedial reading and spelling.

The program can also be used as a training device for research and development staff who develop Computer-Assisted Instruction (CAI) programs, inservice teacher training institutes, and graduate education programs in various specialties (e.g., curriculum design).

GOAL(S) OR PURPOSE(S)

SPLPAT provides instruction and practice designed to enable the student: (1) To relate written words in terms of similar spelling patterns, (2) to relate spoken words in terms of similar sounds, and (3) to generate at least two different plausible spellings based on the sound of a word.

PATTERNS OF USE

The lessons are arranged primarily in order of the reading difficulty of the word instances and secondarily according to the difficulty of the target sound. There is room for rearrangement within the three grosser categories of easy, medium, and hard. Lessons are not tightly sequenced, nor are they cumulative.

The program can be used to supplement any standard elementary school spelling curriculum or can be used as a stand-alone program for teaching the specific phoneme-to-grapheme mappings contained in the lessons. It can also be used as preparation for practice in generating alternative spellings to provide knowledge of plausible alternatives.

ASSESSMENT PROVISIONS

There are no pretests for this program. Teachers are free to use it according to their own assessment of student needs. Percentage scores reflecting the students' levels of correct responding are fed back to the classroom teacher through the student flowcharts to aid the teacher in this evaluative and prescriptive process.

TIME REQUIREMENTS

An average lesson takes about 50 minutes. With 16 lessons, approximately 13 hours are typically required to complete the entire program.

The lessons are often used on an assigned-time basis. Students work on a lesson for about 20 minutes, stop, and return to the program in the next few days. The computer automatically enters the student at the point at which the last session was terminated. The style of use depends upon individual teachers.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype-compatible cathode-ray tube (CRT) and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. A month of expert programing would be required to adapt the program to most local time-sharing systems.

Teacher orientation requires approximately 1/2 hour, and each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performing within the program. Students work individually on the program, so any school organization that allows students to work at their own pace on different objectives within the same classroom can support work on the program.

ASSURANCES AND CLAIMS

Assurances

During 2 years of operation in a school setting, no observations were made of harm to students as a result of using the program. Students are treated uniformly, regardless of race or sex. The content of the program is words and spelling patterns, and there are no sex, racial, age, socioeconomic, or religious biases.

At the field test site, the program operates with minimal producer intervention, so it is likely that the program will operate successfully at other sites.

Claims

Preliminary study suggests that instruction on the program appears to influence the quality of alternative spellings generated in a set of transfer words. Instruction encourages use of the plausible alternatives, e.g., the ones that are taught by the program. Definitive statement of the program's effectiveness awaits further study.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student flowcharts	16 per student	.10	Consumable yearly	
Teacher resource sheet	1 per teacher	1.00	Reusable	
Computer program	1 per computer system	Cost of duplication	Reusable	

Note: The required computer hardware, software, and time-sharing systems necessary to implement the program in a school are described under "Implementation Procedures." Implementation of this program requires either a consultant or school district personnel to plan its use in the context of a classroom spelling program. Assistance in planning for implementation is available from the developer.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
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Karen Block, Project Director
Dorothea P. Simon, Senior Research Assistant

AVAILABILITY

Copyright is pending. SPLPAT is currently available from:

Learning Research and Development Center
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3939 O'Hara St.
Pittsburgh, Pa. 15260

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 016

SWRL LANGUAGE ANALYSIS PACKAGE

A computer-assisted package which enables the user to reduce textual data to a form amenable to analysis

For years there have been packaged sets of computer programs in statistical areas. These packages have made available sophisticated generalized computational and analytic capabilities in a form especially suited for easy use by researchers whose basic orientation is not that of computer science. The *SWRL Language Analysis Package* (LAP) offers analogous service for the analysis of textual data. Just as a social scientist can use a package like BMD or SPSS to analyze numerical data, a linguist or language researcher can use LAP to analyze textual data; convert the textual data to a form amenable to statistical analysis; and prepare references such as indexes and concordances.

The LAP consists of a group of modularly structured computer programs, coordinated and integrated into a cohesive package. A nontechnical user's manual is available that describes the capabilities of LAP and the mechanics of its use. A simple user language has been developed to facilitate the translation of user processing requirements into machine compatible form.

The package includes file manipulation functions of sorting, merging, comparing, and selecting. Any file may be reformatted into a readable table with user-specified headings and variable column arrangement. It performs various indexing, statistical, and content-analysis functions.

Carefully constructing the package in a highly independent modular manner, LAP developers have made it easy for individual routines to be "unplugged" and replaced when a more efficient or powerful routine is made available or when a new approach dictates new combinations of functions. Thus, the system will be dynamic and open-ended, capable of being easily updated to keep pace with the state of the art.

SUBJECT AREA(S)

Analysis of textual data in any subject area is the subject area.

INTENDED USERS AND BENEFICIARIES

LAP opens up sophisticated language analysis capability to the novice, which heretofore required highly specialized training. It is of benefit to the academic school and publishing communities in particular.

GOAL(S) OR PURPOSE(S)

The goals of this program are to offer generalized computational capabilities for the analysis of textual data in a form especially suited for easy use by inquirers whose basic orientation is not that of computer science.

PATTERNS OF USE

Language processing typically involves inquiry where the output of one program must serve as the input to another step of processing. Such linkages are easily facilitated with LAP where one single and consistently structured command language may be used to communicate.

LAP provides the inquirer with many options, permitting one to select precisely and easily only the functions of interest. The inquirer is not limited to simply an exclusive "or"-type selection where one must choose either a key word in context (KWIC) list or an index. It is possible, for example, to produce KWIC's and frequency counts on certain words while simultaneously producing an index and a frequency count of every word in the text.

IMPLEMENTATION PROCEDURES

LAP is currently resident at the computer centers of SWRL and UCLA. Interested inquirers may use the package by telecommunication or by batch mail. The computer software is also available for installation on other computers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
User's manual	Access by user	5.00	Archival	
Computer software	Access by user	Public domain		

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The package is accessible at the SWRL and UCLA computer centers, and computer software is available for installation on other configurations. SWRL claims common law copyright on these materials.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 017

COLOR KEYS TO READING (FORMERLY CALLED STEPPING STONES TO READING)

A program based on the concept that symbols presented to the beginning reader must be limited

Color Keys to Reading is based on the concept that in order to teach the beginning readers to respond to a wide variety of visual symbols, the number of symbols presented to them must be limited or controlled in some way. During the past decade, several reading programs have worked toward accomplishing such control by limiting phonemes and graphemes, limiting the number of words presented to the learner, or introducing special symbols that regularize grapheme-phoneme relationships. This product is designed to accomplish control of symbols through color-coding. It emphasizes a phonics approach to the decoding process as the primary strategy to be used by the beginning readers until they are able to replace it with syntactic and semantic cues in the written text. The program, by using color-coding, has been able to aid decoding without limiting vocabulary or altering traditional orthography. It is unique in sequencing sound-to-sight or auditory-to-visual materials in such a way that the various visual representations of vowel sounds can be introduced simultaneously, thereby allowing for the introduction of a more extensive vocabulary than is usual for beginning reading programs.

The program consists of a prereading workbook and auditory pretraining exercises, 12 readers and alternate readers, 8 supplementary readers, and 12 workbooks. Each of the readers in the program is divided into teaching pages (pages on which the vocabulary is presented) and stories in which this vocabulary is practiced. In addition to the above materials, teacher's guidebooks have been prepared containing procedures, suggestions, and techniques for optimizing the use of readers, workbooks, and supplementary materials. Assistance and instruction about coordinating other language-arts skills (specifically, handwriting and spelling) with the program are included in the guidebooks.

The teaching method used is a phonics approach—beginning with word analyses (involving a response for each element of the word) followed by blending of the elements. The general outline of the procedures used in presenting the material is as follows:

(1) Letter-sound association—The teacher guides the children in identifying the new phoneme and associating it with the printed letters

(2) Vocabulary study—The teacher guides the children in decoding and defining color-coded word lists on the teaching page by sounding and blending

(3) Practice—Children read color-coded stories containing the new vocabulary and do associated workbook exercises.

The product has special features which facilitate teaching and learning. When consonant graphemes are introduced, each represents only one sound. Phonemes are introduced sequentially on the basis of the frequency of the appearance of their printed representations in the text.

Unsounded or silent letters, such as the "b" in "lamb," are printed in a different type style. Materials are printed in a special font which has been modified to minimize visual confusions, such as between the letters "h" and "n." Each of the first 11 vowel phonemes is associated with a color, and the multiple graphemic representations of the vowel are printed in that color (e.g., the "e" in "he," the "ea" in "meat," and the "y" in "happy" are all printed tan). Each color association is taught, used in stories, and is systematically withdrawn from the text.

The workbooks have been designed to parallel the sequence of materials and provide a major vehicle for transfer to regular print. They have been printed using the chemical process "Write and See." When the child marks the correct answer in a box in the workbook, the box changes color, thereby allowing the child to obtain immediate feedback.

SUBJECT AREA(S)

Color Keys to Reading is a beginning reading program. With a heavy emphasis on phonics, the program is designed to ease the decoding problem for beginning readers in a way that allows them to acquire a relatively large vocabulary. It is a self-contained program individualized by degree of structure and method.

INTENDED USERS AND BENEFICIARIES

Students of all abilities in grades K-2 who are learning beginning reading in English are the intended users.

GOAL(S) OR PURPOSE(S)

A student successfully completing this program is expected: (1) To acquire a reading vocabulary to 2,000 words, (2) to be able to discriminate the critical differences among visually different forms and to be sensitive to where these differences occur, (3) to be able to use the sound-symbol relationship of elements within words to decode those words, and (4) to learn "phonic rules" (either explicitly or implicitly) and their applicability.

PATTERNS OF USE

Color Keys to Reading is a self-contained program, individualized by degree of structure and method. It may be used as part of a curriculum in beginning reading for students in grades K-2. Assistance and instruction in coordinating other language-arts skills (specifically, handwriting and spelling) with the program are included in the teacher's guidebooks.

ASSESSMENT PROVISIONS

Diagnostic tests are provided for each of the 12 levels of the program. These tests are used to determine whether, in going to the next level, the student should use the version with the special color coding or the version printed in standard black-and-white type.

TIME REQUIREMENTS

When integrated into a conventional school's normal reading period, the program can be completed in 1 to 1-1/2 school years.

IMPLEMENTATION PROCEDURES

The program can be used in many kinds of classrooms and requires no special teacher training, staffing, or facilities. Teacher's guidebooks contain procedures, suggestions, and techniques for optimizing the use of readers, workbooks, and supplementary materials. Assistance and instruction in coordinating other language-arts skills (specifically, handwriting and spelling) with the program are included in the guidebooks.

Personnel Required for Product Adoption and Implementation

No special personnel are required. A classroom teacher without special training can implement this program.

ASSURANCES AND CLAIMS

Assurances

Color Keys to Reading (formerly *Stepping Stones to Reading*) is the result of a working arrangement between a publisher (Meredith Corporation, Appleton-Century-Crofts/New Century Educational Division) and a research and development center (The Learning Research and Development Center) in which the publisher was one of the original contributors of funds for basic research and development work. Prototype versions of the materials were developed, tested in small-scale field tests, and revised by The Learning Research and Development Center (LRDC) in cooperation with Harvard University, Graduate School of Education. These prototypes are in the hands of the publisher—now, New Century Education Corporation—for final testing and revision under LRDC's general supervision. Any indications of harmful effects or social unfairness will be taken into account in the publisher's revisions.

Claims

National standardized tests were administered to children in two cities at the end of 1 year of the program to assess the students' general abilities. Overall achievement as indicated in the standardized posttest score data showed that performance of children in the city where they were able to complete the program was generally far above average. In the second city, where many children were not able to complete the program due to a teacher strike, performance on the posttests was average for their grade level. In both cities, the highest subtest scores on the Stanford Achievement Tests were on Word Study Skills and Vocabulary

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Prereading workbook and auditory pretraining exercises, readers (12), alternate readers (12), supplementary readers (8), and workbooks (12)	Not determined*	Not determined*	Readers reusable, workbooks consumable yearly	
Teacher's guidebooks (12)	Not determined	Not determined	Reusable	

*A feasibility field test and a market analysis are to be undertaken by the publisher, New Century Education Corporation, 440 Park Ave., New York, N.Y. 10016.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15260

Paul M. Kjeldergaard, Project Director
Roselyn Frankenstein
Robert Glaser

AVAILABILITY

Copyright is pending. A prototype version is in the hands of the publisher, New Century Education Corporation, which will undertake final testing and revision of the program. Requests for information should be directed to:

New Century Education Corp.
440 Park Ave.
New York, N.Y. 10016

INFORMATION CURRENT AS OF MARCH 1975 ■

SYSTEMATIC PROGRESS IN READING AND LITERATURE (SPIRAL)

RD 030 018

An individualized program for grades 4-6 to maximize reading comprehension and application

Systematic Progress in Reading and Literature (SPIRAL) is an individualized reading program for the intermediate grades (4-6) which has as its central aim increasing reading achievement, encouraging academic interests and motivation, and developing autonomy and self-esteem. Development has been based primarily on assumptions concerning language development which have been proposed by psycholinguists such as Carroll, Goodman, F. Smith, and Wardhaugh. These assumptions support the belief that comprehension is a complex global process composed of many interrelated components. SPIRAL is unique in comparison to other programs in that it is a total reading comprehension program which integrates components so that interrelationships among language skills can be established. The individualized format permits the student to work at the appropriate level and at an individual rate. Many learning options are available to the student as self-management and decisionmaking skills are emphasized throughout the program. Literary skills are taught systematically and exposure to high-quality literature encourages a habit of reading for information and enjoyment. Continual experience with basic comprehension and study skills helps the student locate, organize, and interpret information. Life skills involving learning how to work with others and how to plan, execute, and evaluate one's work are stressed regularly. Also, the program's flexibility in usage and the nonconsumable nature of the materials allow for an economically viable program.

SPIRAL consists of three major components. First, there are literature anthologies. Literature forms the core of SPIRAL and is the basis for the interrelationship among the components. Selected readings representing many authors, all genres, various cultures, and many historical periods are contained in the SPIRAL anthologies. Content for the anthologies, selected on the basis of interest of intermediate-grade children, is presented in six themes entitled: "Animal Encounters," "Conflict Searching," "Communication," "Natural," "Supernatural," and "Making It." Literature lessons are taught mainly through teacher-directed small-group discussions called Teacher-Guided Reading Lessons or TGR's. A theme-related bibliography guides additional student independent reading.

The second component is entitled "Comprehension Skills." This component provides individualized instruction in syntactical and substantive (developmental) skills as well as study skills. Instruction is provided in self-instructional booklets and makes use of selections contained in the literature anthologies.

Application activities are the third component. Both literature and skill components are related to application activities in order to reinforce and apply learned concepts through speaking, writing, listening, and reading. Since many of the activities are designed for group use, students also learn many life skills such as cooperation, sharing, and planning. Application activities are presented in the form of attractive, laminated 8- by 10-inch cards.

The SPIRAL management system is self-regulated by the student and centers around the use of a "Pupil Planning Booklet," which serves as both a recording and planning device. The students, working at their own rate, meet specified minimum requirements within each theme before beginning a new one. The class is introduced to the SPIRAL program through teacher-directed orientation units which present a prototype of the total program to the student. During the orientation, the student learns how to use the planning booklet, experiences a teacher-guided reading lesson, learns the format of the skill modules, uses a study skill reference card in conjunction with activities, and experiments with application activities. After completion of the orientation unit, the students are given the theme planning booklet and anthology for their assigned level and begin work in the theme. Additionally, each theme includes a complete teacher's guide which includes an overview of SPIRAL, a description of components, program objectives, an overview of the theme, a list of application activities, teacher-guided reading lessons, skill introductory lessons, class record sheets, answer keys, and theme bibliography

RD 030 018

SUBJECT AREA(S)

The subject area is elementary reading and comprehension skills.

INTENDED USERS AND BENEFICIARIES

SPIRAL has been designed for students in grades 4-6. The readability of materials ranges from grades 3.5 to 9.0. The program is intended to be used successfully by slow, average, and advanced learners, as each student may progress according to individual interests and needs. The only prerequisite to the program is the successful completion of a primary reading program or a minimum standardized reading achievement test score of grade 4.0.

GOAL(S) OR PURPOSE(S)

SPIRAL's four goals are: (1) To teach basic comprehension skills in the context of concept development; (2) to nurture interest in reading for purposes of enjoyment, as well as for knowledge acquisition and utilization; (3) to teach self-management skills through decisionmaking and problem solving; and (4) to enhance self-esteem through increased self-confidence and self-understanding.

PATTERNS OF USE

Each theme includes student materials at three readability levels: 3-4, 5-6, and 7-9. Students move through the program working on comprehension skills at increasing levels of difficulty. Skill booklets may be used in any order as long as the student is placed, on the basis of diagnostic pretests, at the proper instructional level for the particular skill.

ASSESSMENT PROVISIONS

Skill pretests assess the student's ability with respect to a particular skill. Material contained in self-instructional and self-marking skill booklets are arranged in sequentially reinforced increments with pages for pretesting, instruction, practice, and related activities. Mastery is based upon the successful completion of a posttest which is teacher marked. The teacher is provided with evaluation questions for application and study skill activities.

TIME REQUIREMENTS

Approximately 45-60 minutes should be devoted to SPIRAL daily. An average child can complete the materials in one theme in about 3 months.

IMPLEMENTATION PROCEDURES

The implementation of SPIRAL requires no special equipment or classroom arrangement. The program does, however, rely heavily on the use of library books and reference materials, so these should be made readily available. Program materials are packaged in large, portable containers. Teacher preparation materials are self-instructional. Each theme includes a pupil orientation unit, accompanied by a teacher's manual as well as a complete teacher's guide.

Summary Cost Information

The cost figures are based on a class of 35 students meeting 45-60 minutes daily for 1 school year. Three classes could use the same materials during any one class period and, thereby, significantly reduce the costs. To use the materials for more than one class, the implementer need only purchase additional sets of consumable items at a rate of one set per additional class.

Using the present developer production arrangements, the total product installation cost and initial annual costs per school (based on 1 class of 35 students in each of grades 4-6) is $2,170. The average continuation cost is $315, or $3 per student.

At present, SPIRAL materials are produced using the developers' limited production facilities. All cost estimates are based upon these present arrangements. Expected commercialization of the product should substantially reduce the costs presented here.

Personnel Required for Product Adoption and Implementation

The SPIRAL program contains a self-instructional teacher training program as well as student orientation units. Training poses no additional requirement or cost. The program does not use an aide.

ASSURANCES AND CLAIMS

The present SPIRAL reading program was first formulated in fall 1973 from the lineage of IPI reading and an earlier SPIRAL version. As of March 1975, the first of four planned basic program divisions (i.e., themes) has been extensively reviewed by internal and external evaluators, tried out with individual students from the target population, and used with three classrooms of students from an inner-city sample of the target population. Since the developmental model employed with SPIRAL is based on a belief in successive approximations, the data gathered to date have been of a formative, rather than a summative, variety; that is, these data have been used both to make necessary revisions in theme I materials as well as to improve the assumptions and procedures of development of the remaining theme materials. A summary explanation of the developmental model employed is presented in the summary of supporting evidence.

Assurances

The assurances offered for SPIRAL and the claims made about SPIRAL are based on all of the aspects of the developmental sequence discussed above. Briefly, the formative data suggest that the program does not perpetuate social biases, is at least as effective as other comparable products, and can be used outside the developmental site. SPIRAL materials not only meet these minimum requirements but also extend them to the point of providing instructional options for the student who may not prefer particular materials, providing opportunities for exposure to various social groups, and providing content and instructional strategies not found in more traditional programs.

As a regular part of the developmental sequence, all materials are reviewed both by internal and external experts for "potential harmfulness" and "bias." Since the anthology selections present the most likely source of these problems, if any should exist, the selections are also reviewed by teachers using the program and some parents of the students in the program. Data from the reviewers on the selections will be used during the next scheduled revision phase as an aid in determining possible changes and deletions.

Students, representing various social groups, were exposed to individual program materials during an early phase of theme I development; later they were exposed to the entire program. In this group of more than 200 students, there has not been a known incident of physical, psychological, or sociological harm.

The three teachers employing SPIRAL in the developmental classrooms have over 20 years of combined teaching experience. On several occasions, each has commented that the SPIRAL materials, with few exceptions, are better than other reading programs that they have used. The students presently in the program will be posttested at the end of the school year in an attempt to substantiate these teacher perceptions.

To date, the materials in SPIRAL have been used only at the developmental site. The program is packaged and, therefore, transportable. Plans are now being formulated to install the program in spring 1975 at a second developmental site. In this second installation site, there will be no designer intervention.

Claims

The data collection process incorporated within the developmental evaluation sequence is responsible for the amassing of evidence for the following claims of program effects when SPIRAL is used as specified by the designers.

1. The SPIRAL program enables any student who meets specified prerequisites to work through skill instruction, literature, and related activities at a rate and to an extent consonant with ability.
2. Regardless of race, sex, religion, or socioeconomic status, SPIRAL promotes positive attitudes toward reading for information and enjoyment.
3. Developmental skill modules instruct students to reach mastery at a given criterion level on specified objectives.
4. Anthology selections create and maintain student interest, are well matched to students' reading and conceptual levels, and convey socially important thematic concepts.
5. The management system facilitates attempts by students to be more responsible for their own achievement and also frees the teacher to engage in instructional activities on an individualized basis.
6. Teacher-guided reading lessons reinforce the skill and literature objectives, are effective in obtaining the intended objective, and provide for meaningful group interactions.
7. Application activities reinforce both literature and comprehension skill objectives.
8. Evaluation materials (skill pretests and mastery tests) are valid, reliable, criterion-referenced measures with good discriminatory powers.

The logical and empirical rigor imposed by the evaluation/development model employed seems to afford a developmental sequence in which designer intentions will be realized in actual student performance.

RD 030 018

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Anthologies	3 per student	840.00	Every 3 years	
Skill modules (including skill checks)	450 per class	585.50	Every 3 years	
Study skill booklet	243 per class	136.00	Every 3 years	
Challenge sheets	90 per class	6.30	Every 3 years	
Answer sheets	36 per student	75.60	Consumable	
Application activity cards	333 per class	133.20	Every 3 years	
Study skill cards	48 per class	9.60	Every 3 years	
Bibliography	9 per class	13.50	Every 3 years	
Teacher's guide	3 per class	18.75	Every 3 years	
Pupil orientation unit	1 per 2 students	55.44	Every 3 years	
Management system kit	1 per student	29.40	Consumable	
Student notebooks (optional)	1 per student	56.00	Every 3 years	Implementer

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Helen Felsenthal, Project Coordinator

AVAILABILITY

Themes I and II will be available as of March 1975 on a limited test availability basis from the developer. Themes III and IV will be available November 30, 1975. Further funding is needed to develop themes V and VI and to revise themes I-IV.

These are/will be available from the distributor:
Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

INDIVIDUALLY PRESCRIBED INSTRUCTION IN READING (IPI READING)

RD 030 019

A reading program of sequenced reading skills organized into units and levels of work

Individually Prescribed Instruction in Reading (IPI Reading) is an individualized reading program for students in grades 1 through 6. IPI combines a hierarchical framework of behaviorally stated objectives, correlated diagnostic and evaluative instruments, curriculum materials, alternative instructional techniques, and systematic management into a comprehensive program of reading instruction. The curriculum has been developed by sequencing specific reading skills and organizing these skills into units and levels of work. Sample topics include visual discrimination, auditory discrimination, structural analysis, vocabulary development, literal comprehension, interpretive comprehension, evaluative comprehension, library skills, reference skills, and organizational skills.

There are four stages in IPI Reading. The first stage, Prereading, is divided into reading readiness and prereading. In addition to the usual prerequisites taught in reading readiness, there is an emphasis on specific phonemic/graphemic correspondences to prepare the child for work in the first book, the prereader. Decoding, the second stage, stresses the translation of printed symbols into meaningful speech sounds. The third stage, Transition, continues instruction in decoding and comprehension. The fourth stage of the program is divided into skills development and application, directed reading, and selected reading. In the last part of this stage, the student chooses, within certain limits, what to read. This stage uses specially prepared materials, as well as library and other commercially prepared resources.

Throughout the program, students direct their own learning activities and work at their own rate. They are expected to obtain their own materials and begin work with a minimum of teacher direction. Available learning materials include programed readers, tapes and tapebooks, skill sheets, storybooks, and language master cards. The use of other supplemental materials is encouraged.

Placement tests, pretests, curriculum-embedded tests, and posttests place the student at the appropriate reading level and isolate areas of particular learning difficulty. How the student studies the learning objectives and which materials are used depends upon the characteristics of the learner. Some students may prefer to work by themselves, others might prefer a peer tutor, while still others may do best in a small-group setting.

SUBJECT AREA(S)

Reading.

Visual discrimination, auditory discrimination, structural analysis, vocabulary development, literal comprehension, interpretive comprehension, evaluative comprehension, library skills, reference skills, and organizational skills are discussed.

INTENDED USERS AND BENEFICIARIES

The program has been developed for children of all abilities in the 1st through 6th grades.

GOAL(S) OR PURPOSE(S)

IPI Reading has three broad goals: Reading proficiency, student motivation, and student self-initiated learning.

PATTERNS OF USE

IPI Reading can be used in any kind of school setting: traditional classroom, open classroom, and learning center. The basic program is self-instructional, but individual tutoring, group teaching, peer help, and group discussion should be available when required. The curriculum is based on a highly developed hierarchy of decoding, comprehension, and application skills. Where the student begins in the hierarchy and the instructional pattern that is followed depends on individual needs, learning characteristics, and abilities.

ASSESSMENT PROVISIONS

Students are placed on the skills continuum by a placement test. Once the level and unit designations have been made, a pretest for a specific unit is given. The pretest determines the student's prescription or lesson plan. Progress within a skill is monitored by a curriculum-embedded test. Finally, posttests determine the student's mastery or nonmastery of a particular skill. Student progress is also monitored by oral tests, tapebook responses, and end-of-the-book tests. In addition, the teacher has the opportunity to hear the student read and respond to evaluation questions that determine comprehension of the reading materials.

RD 030 019

TIME REQUIREMENTS

IPI Reading should be used one period daily in the 1st through the 6th grades.

IMPLEMENTATION PROCEDURES

The program requires a center where materials, hardware, and cassettes can be stored and at the same time be readily accessible to students. Classes should be scheduled so as not to overcrowd the materials center at any one time. Also, if possible, developers recommend the assistance of a teacher's aide to carry out noninstructional tasks, if possible.

Summary Cost Information

The costs are based on a school having 1 class in grades 1-6 and 30 children per class, a total of 180 students. Costs are reduced for multiple classes at each grade level. Prices of materials from commercial sources are subject to change.

Personnel Required for Product Adoption and Implementation

The developers recommend, whenever possible, the assistance of a teacher's aide to carry out noninstructional tasks.

ASSURANCES AND CLAIMS

IPI Reading, including teacher and administrator training packages, can be easily installed and maintained in either open- or structured-learning settings by classroom teachers without any assistance from the developer. The program has been used by varied student populations in a wide variety of learning settings ranging from regular classes to compensatory education classes and special education groups (such as handicapped). Thus, the program has demonstrated transportability and replicability.

IPI Reading materials are free from social biases. The content of the program is neutral regarding religion, age, sex, ethnic, and socioeconomic stereotypes. Male and female and racial representations in the program meet design intentions for social fairness.

IPI Reading, an edition revised on the basis of field testing, has been in use in more than 80 schools throughout the country for at least 3 years. Thus far, the developers have received no reports of harmful effects due to using the program.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Primary reading package:				
Programed reading materials	*	1,736.49	Consumable	Webster Division, McGraw-Hill Book Co.
Sound tapebooks 3-20	30 each	351.00	Reusable	
Scholastic paperbacks	5 sets	39.00	Reusable	Scholastic Book Services, Englewood Cliffs, N.J.
Group and individual storybooks	20 sets group, 10 sets individual	385.00	Reusable	
Tapebook cassettes	2 sets	722.50	Reusable	Magnetix Corp., Winter Garden, Fla.
Tapebook playback units	30 machines	1,800.00	Reusable	Company of user's choice
Notebook covers (optional)	90	40.80	Reusable	Local supplier
Double pocket portfolios	90	11.50	Consumable	Local supplier
Intermediate reading program:				
Printed materials	*	2,384.23	Reusable	
Paperbacks—selected and directed	20 sets directed, 1 set selected	1,350.26	Reusable	Various commercial sources
Supplementary books	1 set	500.00	Reusable	Various commercial sources
Tape playback unit	2	120.00	Reusable	Company of user's choice

MATERIALS AND EQUIPMENT (continued)

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Cassettes	2 sets	65.00	Reusable	Magnetix Corp., Winter Garden, Fla.
Language master machine	2	500.00	Reusable	Local supplier
Language master cards	2 sets	160.00	Reusable	MCM Corporation, Greenwich, Conn.
Notebook covers (optional)	90	40.80	Reusable	Local supplier
Double pocket portfolios	90	23.20	Consumable	Local supplier
Library pocket cards	2,000	17.40		Local supplier
Book charging cards	2,000	9.00		Local supplier

*For school having 1 class in grades 1-6 (30 per class) total 180 pupils.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103
and
Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15260

AVAILABILITY

IPI Reading materials are currently available from:
Research for Better Schools, Inc.
1700 Market St., Suite 1700
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 020

INDIVIDUALIZED SPELLING AND WRITING PATTERNS (ISWP)

An individualized spelling series to enable children in grades 2-6 to master the spelling of most commonly used words

Individualized Spelling and Writing Patterns (ISWP), formerly called *IPI Spelling*, is an individualized spelling series that is now published by Follett Publishing Company, Chicago, Illinois. ISWP includes most commonly used words found in the writing vocabulary of elementary grade children. The program also offers an inductive instructional approach for mastering the underlying phonic generalization for building spelling skill.

ISWP consists of five textbooks (books B, C, D, E, F). The books are divided into levels or words arranged by degree of difficulty. Levels are further subdivided into lists. Lists include word patterning activities, opportunities for the student to make inductive generalizations about spelling rules, exercises in word patterns, sentence patterns, phonetic spelling, and reading and writing. Students are not expected to do all the exercises in each list. They do only those which are necessary for mastery of the list.

Books C through F are divided into half-books of three levels each. A half-book is approximately one semester's work. Many students will finish a half-book in less than a semester. Students progress at their own rate and continue to the next half-book even though the semester is not over. Conversely, no student is pressured to complete a half-book in one semester.

There are three phases to ISWP. In the first phase, students are introduced to the series by being paced through all or part of the book that has been designated as appropriate for their grade level. They are oriented to the makeup of the book, the terminology, and the inductive approach to learning language patterns. In the second phase, students become involved in a self-pacing program in the appropriate level of books. Prescriptions, carefully tailored to the child's needs, placement tests, pretests, posttests, review tests, word hurdle tests, and final tests monitor progress and give objective evidence of the child's strengths and weaknesses. The diagnostic tests are on audio cassettes. Students enter the third phase after demonstrating mastery of all the books that are used in the elementary grades. At this point, they may continue in a formally organized program by going on to those books that have been designated as junior high level, or they may be freed from formal spelling work and be placed in a writing and reading program.

Throughout the program, students are responsible for their own learning. They gather their own materials and begin work with a minimum of teacher direction. In the upper grades, students are encouraged to score their own tests. In the lower grades, developers recommend the assistance of aides to carry out noninstructional duties.

SUBJECT AREA(S)

Spelling content area includes word patterns, spelling rules, sentence patterns, phonetic spelling, reading, and writing.

INTENDED USERS AND BENEFICIARIES

ISWP has been designed for children of all abilities in grades 2 through 6.

GOAL(S) OR PURPOSE(S)

Students completing ISWP will have mastered the spelling of the most commonly used words in the writing vocabulary of elementary grade children. In addition, they will be able to make their own inductive generalizations about spelling rules and underlying phonetic patterns and will be familiar with the four basic sentence patterns of the English language.

PATTERNS OF USE

ISWP can be used in any kind of school setting: traditional classroom, open classroom, and learning center. Students enter the program by taking a placement test which determines their appropriate starting point. Then, specific spelling skills are further narrowed down in a pretest. Students work through the self-instructional lessons at their own pace. The management problem created by having students within one classroom working on different spelling units is solved by the use of the cassette tapes.

ASSESSMENT PROVISIONS

A number of diagnostic tests are included in the program. These tests isolate spelling difficulties, monitor student progress, and indicate mastery. Placement tests are used to determine in which half-book the student should begin work. They consist of every sixth word of the half-book to which they apply. Pretests consist of the 20 words of an individual list and are taken before work on the list has started. Posttests are made up of the same 20 words but are taken after work on the list has been completed. Review tests are lists of every fourth word taken from the level just completed to determine mastery of that level. They are also used to place students in a specific level. Word hurdle tests are tests made up of all, or a sample, of the words which the student failed to master on the above tests. These tests are the only ones not on cassette tape. Final tests consist of the same list as the placement test but are taken after work on the half-book has been completed to determine mastery of the half-book.

TIME REQUIREMENTS

ISWP should be used at a minimum of 90 minutes per week. This time, however, can be adapted to the needs of individual schools.

IMPLEMENTATION PROCEDURES

The program requires a center where equipment (e.g., materials, hardware, cassettes) can be stored and at the same time can be readily accessible to students. Classes should be scheduled so as not to overcrowd the materials center at any one time. Teacher's aides are suggested to help students locate materials and to grade tests.

Summary Cost Information

The total cost to implement a program in grades 2-6, with 2 sections per grade and 30 students per section, yielding a total of 300 students and 10 teachers, would be $1,731.90 for the first year and $225 per year for continuation costs. These costs assure the availability of tape playback units. The number of units necessary would depend on scheduling patterns.

Personnel Required for Product Adoption and Implementation

In the lower grades (2-3), developers recommend the assistance of aides to carry out the noninstructional duties. A complete inservice teacher's manual provides information necessary for implementing the program.

ASSURANCES AND CLAIMS

ISWP, which includes a teacher training package, can be easily installed and maintained in either open- or structured-learning settings by classroom teachers without any assistance from the developer. The program has been used by varied student populations in a wide variety of learning settings, ranging from regular classes to compensatory education classes and special education groups (e.g., handicapped). Thus, the program has demonstrated transportability and replicability.

ISWP materials are free from social biases. The content of the program is neutral regarding religion, age, and socioeconomic status (SES) stereotypes. Male and female and racial representations in the program meet design intentions for social fairness.

ISWP, an edition revised on the basis of field testing, has been in use in more than 30 schools throughout the country. Thus far, neither developers nor the publishers have received any reports of harmful effects due to the program.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student booklets	1 per student	1.35	Reusable	
Response booklets	1 per student	.60	Consumable	
Cassettes	2 sets per school	965.00	Reusable	
Teacher's manual	1 per teacher	4.38	Reusable	
Script books	1 per teacher	2.85	Reusable	
Cassette playback unit with ear phones	5-10 per school depending on scheduling requirements	40.00 (approx.)	Reusable	Local supplier

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pa. 15261

AVAILABILITY

ISWP was copyrighted in 1973, and copyright is claimed until 1983. ISWP is currently available from the publisher:

Follett Publishing Co.
1010 West Washington Blvd.
Chicago, Ill. 60607

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 021

THE NEW PRIMARY GRADES READING SYSTEM

An individualized adaptive system for teaching reading skills to students in grades 1-3

The *New Primary Grades Reading System* (NRS) is an individualized, adaptive system for teaching the reading skills traditionally included in the first 3 years of reading instruction. LRDC's aim in developing NRS was to build a reading system that allows for individual variation but not for individual failure.

NRS is individualized in that it permits children to progress at different rates. It is adaptive in that alternative teaching strategies to meet the needs of different children are built into the system. NRS is organized in such a way that a teacher can monitor a classroom of children, each with different needs, who are doing different things at the same time.

NRS uses a code-breaking approach to beginning reading. A mixture of synthetic and analytic phonics is employed, along with text displays that illustrate linguistic principles. Sounding and blending are considered to be fundamental decoding skills. Symbol/sound correspondences are taught in an instructional sequence that is carefully designed to avoid confusion and to give children a repertoire of useful symbol/sound correspondences early in the instructional process. Then children are taught to use a systematic blending technique that enables them to slide the sounds together into words. However, decoding is not recognized as an end in itself. NRS is concerned with the early building of a recognition vocabulary, and encourages children to fade the overt blending behavior when no longer needed. Comprehension skills are considered vital and are tended to in conjunction with decoding. Many of the responses to formats in the students' workbooks can only be made after the children have read and understood the printed material.

NRS is composed of 14 levels, each containing approximately 10 instructional lessons. The term "level" was selected to suggest horizontal as well as vertical progress through the system. A prescriptive portion of NRS (blending booklets, workbooks, cassette tapes, and group readers) is intended to add new skills to the student's repertoire, while a choice portion of the system (read alone stories, games, and manipulatables—concrete objects for children to manipulate as an aid to concept development) is a series of activities intended to maintain skills and to build fluency at the student's current level.

NRS is characterized as a reading system because of the interrelationships among the component parts and the integration of those parts into a total management scheme. The design of NRS reflects concern about classroom management—the amount and kind of independent work provided; the response modes used at different levels; the kinds of games, stories, and manipulables developed; the structure and placing of tests; and the type of training necessary for teachers.

NRS facilitates individualization of instruction by providing a variety of materials and decisionmaking opportunities for which the students do not need direct teacher supervision. In the first two levels, instruction is conducted by the teacher with small groups of students; the teacher maintains contact with all children and monitors their learning directly. Starting with level III, lessons are presented by means of cassette tapes. Students operate the cassette players independently, do workbook pages independently, and work independently with the wide variety of choice activities that are available. The teacher circulates among the children as they work, helping them when needed and administering progress checks. Group stories are conducted by the teacher at specific intervals. Additional materials are provided for occasions when the teacher may request that a child recycle certain parts of the curriculum.

A teacher training package is an integral part of NRS. The developers of NRS have made available to individual teachers a variety of instructional strategies and alternatives, both within the training and within the NRS materials themselves, which are usually contained in some of the pages in the students' workbooks are notes to the teacher which suggest an instructionally relevant teacher-student interaction. This interaction zeroes in on the instructional content being presented in the lesson and helps the teacher diagnose student reading behavior.

The system has been used successfully with both urban and suburban children.

RD 030 021

SUBJECT AREA(S)

Primary grades reading.

There is a total of 14 levels in NRS. By the time students reach level V, there is approximately a 50-50 split in emphasis between comprehension and decoding; by level XII, the split is approximately 75-25.

INTENDED USERS AND BENEFICIARIES

NRS has been designed primarily for students in grades 1-3. However, because it is an individualized program, there are no set limitations or expectations placed on the students as to which parts of the program they complete during any school year. Some students complete the program in 2 years; others will probably not finish until the fourth year.

The experience of the designers and Fry Readability Graphs were used to select the level of difficulty of materials to be used at each level.

NRS was originally conceived for use in urban schools, especially among lower and lower-middle socioeconomic status (SES) populations. It has proved to be effective not only with these populations, but also with suburban and other primary pupils. The adaptive aspects of NRS increase its usability for different populations.

Although designed primarily for the primary grades, NRS has also been used effectively in kindergarten.

GOAL(S) OR PURPOSE(S)

The student successfully completing NRS will be able to read 3d-grade reading selections with understanding.

PATTERNS OF USE

NRS is a comprehensive self-contained system for teaching primary grades reading skills. NRS contains 14 levels, each with approximately 10 instructional lessons. The lessons are composed of specific content geared to build a base of fundamental skills that students must use as they progress from one level to the next. The levels, therefore, are sequential and cumulative.

Levels I and II are led by the teacher in small-group situations. Starting in level III, new instruction is presented to the children individually on cassettes. The NRS blending booklets, cassette tapes, workbooks, and group readers constitute the prescriptive category of NRS. Each lesson has a varying number of sequences, depending upon the difficulty of the content being taught. There is also a remedial sequence in each lesson for the child who needs additional review.

Approximately every fifth lesson is a group story, a story which a small group of children reads and discusses together with the teacher. Once the students are receiving their instruction from cassettes, the group story provides a regular opportunity for peer interaction and for a child to receive teacher instruction.

The choice category of NRS consists of games, read-alone stories, and manipulatables, such as flip-a-word spirals, which are related by their content to an NRS instructional level.

ASSESSMENT PROVISIONS

NRS has incorporated many traditional reading readiness skills into its early levels. When introduced in the 1st grade, therefore, it does not require any specific level of reading readiness.

Progress checks are used to diagnose and assess student reading behavior during the course of the NRS program. The progress checks are an example of the adaptive quality of NRS. They require that the teacher systematically interact with each child and assess needs individually. There are usually two progress checks per lesson, one of them following the regular instructional sequences. From that check, the teacher gets information on student reading behavior and decides whether the student is ready to go on to the next lesson or whether the student should do the review sequence. The second progress check usually follows the review sequence.

Student progress through the curriculum, end-of-year location in the curriculum, and performance on standardized reading achievement tests are other measures of student achievement.

TIME REQUIREMENTS

In general, the required student time is approximately 45-60 minutes per schoolday in grades 1-3. However, because the instruction is individualized, completion time will vary.

IMPLEMENTATION PROCEDURES

NRS as an adaptive system has been designed for a variety of school and classroom organizations. It can be taught in a self-contained classroom; or, to reduce the cost to a school, parts of NRS could be used in the resource center where the more expensive portions of the program are shared among a number of classrooms. If used in a self-contained classroom, NRS requires four to six cassette players with cue stops (and headsets) per classroom. Storage units that make the cassettes accessible to students are needed for each classroom.

Teacher training is necessary before a teacher initially uses NRS. The teacher training component of NRS is currently being prepared by the Learning Research and Development Center (LRDC) staff. The training sessions, as envisioned, will include approximately 4 to 5-1/2 days of instruction led by a local school representative who will have been trained as a leader by LRDC. Periodic inservice training will occur throughout the school year, further using the local trainer and video tape monitor.

Because NRS is an extensive system containing many components, management aspects of NRS have been designed for ease of classroom maintenance. All of the components are coded to make them accessible to both teacher and student. Further, the coding system enables students to return to their proper places materials they have used, thereby requiring the teacher to spend less time "cleaning up" the classroom.

The only consumable materials in NRS are the students' workbooks and a booklet which is used to record which choice activities the child uses. The other components need only minor yearly repairs. The estimated durability of the nonconsumable materials is 5 years.

Personnel Required for Product Adoption and Implementation

A primary grade teacher who has been trained by the NRS teacher training materials will be able to implement an NRS classroom. Curriculum consultation is currently available from LRDC. LRDC consultation will be phased out as local school representatives are trained to field users' questions.

ASSURANCES AND CLAIMS

Assurances

During the development of NRS, it has been used with approximately 175 kindergarten students, 350 1st-grade students, 150 2d-grade students, and 20 teachers in 2 developmental schools that are affiliated with LRDC. The schools have different racial and SES compositions. The developers of NRS have received no reports of harm associated with the use of this product.

Materials were reviewed by LRDC staff on the basis of two questionnaires developed at LRDC. One questionnaire identified equal/unequal treatment of the sexes, races, and ethnic backgrounds of the characters found in NRS. The other questionnaire was a demographic and genre classification of NRS text materials. Within the constraints necessitated by the instructional sequencing of NRS, very few indicators of social bias were found. Several instances of the use of "man" in occupational terms were isolated (e.g., fireman and mailman) at places in the instructional sequencing when it would have been impossible for the student to decode fire fighter, mail carrier, and so forth. A picture of a female fireman or mailman could be used to indicate that the occupational category includes women. In later levels when it is possible for the student to read more complex occupational titles, the developers plan to eliminate occupational titles that identify a particular sex. The generic use of "he" and the typing of the teacher as "she" were also noted occasionally and will be removed during the final revisions of NRS.

In September 1974, NRS was introduced into three 1st grades at an elementary school that is not an LRDC developmental site and had no previous relationship with LRDC or LRDC curriculums. On the basis of this implementation, it appears that the program is transportable. An evaluative study regarding this first test of transportability is underway and will be available in fall 1975.

Claims

One claim is that students in a large urban school who used NRS in the 1st grade are achieving (as measured by the Reading Subtest of the Wide Range Achievement Test) as well as 2d graders in the same school who used the regular Pittsburgh Public Schools basal reading program.

In addition, end-of-year student performance in reading (as measured by the Metropolitan Achievement Tests) indicates that in a large urban school, all five 1st-grade classrooms which used NRS showed achievement at grade level or above. By contrast, a number of classrooms using previous reading programs did not achieve at grade level.

Important instructional strategies in NRS were based on task analyses that hypothesized some of the cognitive processes involved in decoding. Throughout the development of NRS, LRDC staff worked closely with the primary grade teachers at both LRDC-affiliated developmental schools. Information obtained from the teachers was used for formative evaluation and served as a basis for NRS revisions. In addition, throughout the development of NRS, the project staff consulted and interacted with learning psychologists at LRDC.

The teachers at LRDC's two developmental schools which used NRS during the 1973-74 school year were generally pleased with its effectiveness, organization, and ease of management. Teachers were impressed by increased student reading achievement and interest in and motivation toward reading. NRS materials and instructional strategies were effective to the extent that all teachers using the program stated that they would recommend it for use by others.

In addition to the positive teacher response to NRS, another indicator of acceptability can be cited. NRS is currently being used in the three 1st grades of a school which until September 1974 had no relationship to LRDC. After observing NRS in the classrooms, the administration of this school district has made inquiries to LRDC about the possibility of installing NRS in additional classrooms in the district's other elementary schools.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Cassette players	4-6 per classroom*	60.00-100.00	Reusable	—
Cassette storage unit	1 per classroom	**	Reusable	
Student workbooks (38 different workbooks)***	1 per student	**	Consumable over course of program	
Instructional cassettes (354 different tapes)***	2-3 per classroom	**	Reusable	

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Group Readers (7 different books)***	7 per classroom	**	Reusable	
Student blending booklets (9 different booklets)***	5 per classroom	**	Reusable	
Games (118 different games)***	1 per classroom	**	Reusable	
Read-alone stories (97 different stories)***	1 per classroom	**	Reusable	
Manipulatables (10 different sets of flip-a-words)***	1 per classroom	**	Reusable	
Booklet to record choice activities used***	1 per student	**	Consumable over course of program	
Teacher's manuals and other instructional guides (22)***	1 per classroom	**	Reusable	
Classroom set for teaching Levels I and II (includes teacher blending booklets, letter cards, flip-a-words, progress checks, alternative teaching strategies)***	1 per classroom	**	Reusable	
Teacher training package (presently under development; includes printed guides, trainee response pages, video tapes)				

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* These estimates are based on the assumption that NRS is operating in a self-contained classroom.

** These materials are prototypes that have been developed at LRDC. Materials are expensive because they have been developed in small quantities, not using economies of scale or production expertise available to a publishing house. An accurate cost per item cannot be determined at this time.

*** The developers suggest that a 1st-grade classroom be stocked with Levels I-VIII, a 2d-grade classroom with Levels III-XII, and a 3d-grade classroom with Levels VI-XIV. Therefore, the whole program is not found in any one classroom.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Isabel L. Beck, Project Director

AVAILABILITY

An initial version of the *New Primary Grades Reading System* (NRS) will be completed in fall 1975. Revisions and further study of NRS are planned, in addition to continuing development of teacher training materials. A publisher is being sought for the program.

NRS is currently being tested in the 1st and 2d grades in two LRDC-affiliated developmental schools and in the 1st grades of an unaffiliated elementary school. In fall 1975, the program will also be used in the 3d grades of the developmental schools and in the 2d grades of the unaffiliated school. A developmental copyright is pending. Sample prototype materials are available from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

THE SPELLING PROGRAM

An individualized program designed to allow students to practice and acquire spelling words at their own rate

The *Spelling Program* is an individualized program designed to allow students to practice and acquire spelling words at their own rates. The program includes directions for: (1) Initial placement; (2) secondary placement; (3) appropriate selection of spelling words; (4) determination of "optimal learning capacities"; (5) criteria for adding new words; (6) review procedures; (7) daily data collection; (8) maintenance; and (9) samples of data sheets, worksheets, test sheets, and data displays.

The program is designed: (1) To allow students to work with the maximum number of words that they are able to handle; (2) to allow pupils through appropriate placement procedures to work only with words that they do not know, thus reducing the amount of time children often spend studying material they already know; and (3) allow pupils to see success immediately—first by elimination of a word from the study/test list as soon as the pupils demonstrate the ability to spell that word, and second by involving the pupils in viewing and/or charting the cumulative number of known words.

Although a certain sequence of spelling words is suggested in the program, the format could be used with any standard spelling curriculum. Finally, the program can be made nearly teacher-independent through the use of a language master or peer tutors.

SUBJECT AREA(S)

The procedures described in the *Spelling Program* could be adapted to any grade level spelling material.

INTENDED USERS AND BENEFICIARIES

This program is prepared for any student who has the long-range goal of being able to communicate accurately in a written fashion. It is also suited to a learner who is 15 years old (plus) and beginning "spelling" for the first time or a learner whose final placement will be a sheltered workshop. For these learners, the program format would be used with basic survival words (e.g., name, address, and parents' name) as the curricular matter rather than the more traditional spelling curriculum.

GOAL(S) OR PURPOSE(S)

The goal of the *Spelling Program* is to efficiently and effectively teach children to spell. In addition, the program is intended to insure maintenance of spelling skills once they are acquired.

PATTERNS OF USE

The *Spelling Program* is easily adapted to any sequence of words the teacher chooses. The program is individualized and when used with a language master or peer tutor can be largely self-managed by pupils.

ASSESSMENT PROVISIONS

Detailed instructions are given for adequate initial and secondary placement of students so that they are working on material which is new to them. In addition, daily data collection procedures are detailed which allow both pupil and teacher to monitor progress.

TIME REQUIREMENTS

If the program is managed by the pupils, as recommended, the only teacher time involved would be checking the practice and test sheets. This program would be used as part of the standard spelling curriculum.

IMPLEMENTATION PROCEDURES

All the procedures for implementation of this program are included in the program package.

ASSURANCES AND CLAIMS

The *Spelling Program* has been used successfully in three public school classrooms in the Seattle area, as well as with numerous students at the Experimental Education Unit (EEU). There has been no evidence of harmful effects of any kind. On the contrary, pupils who previously had maintenance scores of 40 percent under traditional spelling programs are now scoring 90 percent on maintenance tests.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program manual	1 per teacher	Not determined	Reusable	
Language master (recommended only)	1 per room	Not determined	Reusable	

Note: Since any individualized program can be expensive in teacher time, this program was designed to be used with a language master or peer tutors or aides.

DEVELOPER/AUTHOR:

Experimental Education Unit, WK-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

Corrine McGuigan, Educator
Norris G. Haring, Project Director

AVAILABILITY

The program exists in an experimental edition only. A limited number of copies are available at this time for teachers outside the EEU who volunteer to test the program with their students and to provide feedback on their experience using the program. Further information is available upon request to the distributor:

Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 030 023

INDIVIDUALIZED LEARNING FOR ADULTS– COMMUNICATIONS SKILLS

A program which concentrates on the systematic development of reading ability

Individualized Learning for Adults– Communication Skills concentrates on the systematic development of reading ability. It is designed for young-adult and adult learners whose reading abilities may range from total illiteracy to approximately 9th-grade level.

The program was developed in response to three major problems identified by the Nevada Department of Education in 1969 as hindering the implementation of the Adult Basic Education (ABE) program. They are: (1) The large number of ABE dropouts, (2) the lack of appropriate instructional materials, and (3) the high mobility of the undereducated adult. Individualized instruction was perceived to be a reasonable solution to all three problems. Therefore, Individually Prescribed Instruction (IPI), a program developed for and extensively disseminated to elementary school learners, was used as a model in developing the *Individualized Learning for Adults* (ILA) program.

The ILA reading continuum consists of 129 performance objectives. These are organized into nine areas: Phonic analysis, structural analysis, vocabulary development, literal comprehension, interpretive comprehension, evaluative comprehension, library skills, organizational skills, and reference skills.

Five entrance tests sample the learner's performance in each area of the continuum and indicate the appropriate starting level for each student. Seventy pretests and posttests plot the learner's route through the instructional materials and determine what the student does or does not know about the content. The instructional component is comprised of 129 skill booklets, 1 for each of the program's performance objectives. Included in each booklet are two skill tests to monitor student progress and help make instructional decisions. A series of 44 cassette tapes also functions as part of the instructional materials.

Once students have been appropriately placed, they move through the program at an individual pace and study only that not already learned. The ILA teacher serves primarily as a manager who oversees the functioning of the program, tutors individuals or small groups, and acts as a resource to the learner. To enable the teacher to devote more time to individual learning problems, developers recommend the use of a nonprofessional aide for clerical tasks.

SUBJECT AREA(S)

Adult basic education—reading.

Subject areas include: Phonic analysis, handwriting, structural analysis, vocabulary development, literal comprehension, evaluative comprehension, library skills, organizational skills, and reference skills.

INTENDED USERS AND BENEFICIARIES

The program has been specially designed for adult and young-adult preliterate and semiliterate learners.

GOAL(S) OR PURPOSE(S)

ILA seeks to improve the reading skills of preliterate and semiliterate adults through an individualized instructional system which emphasizes purposeful, self-directed learning; and to provide the learner completing the entire continuum with approximately a 9th-grade reading-ability level.

PATTERNS OF USE

The program can be used in essentially any Adult Basic Education (ABE) setting. Field testing has validated its use in ABE classes, secondary schools, correctional institutions, and the Armed Forces. ILA is largely self-managed and self-instructional. Developers encourage the use of supplementary materials when appropriate but point out that the program is not amenable to substantive change.

ASSESSMENT PROVISIONS

The student's entry level into the program is determined by a series of five placement tests. Pretests, taken before work in a specific area is begun, measure the student's skill within each area; posttests measure mastery of specific objectives. There are 70 pretests and 70 posttests. Evaluative instruments are also embedded in each instructional booklet.

TIME REQUIREMENTS

The length of time required to complete the continuum will vary depending on the achievement and motivational level of the entering student.

IMPLEMENTATION PROCEDURES

The consumer who is comfortable with the use of performance objectives as guides to instruction and who is philosophically attuned to the values of individualization should have no serious problem with implementing the program. If used with secondary students, parent awareness of the system and its objectives will facilitate instruction. The program is packaged for use as an instructional unit and requires minimum external assistance for successful implementation.

Summary Cost Information

The costs calculated in the table under "Materials and Equipment" are for 50 students. Consumable instructional material can be replaced at $0.02 per sheet. Average total installation cost per student is $69.68; the cost of consumable materials averages $26.46 per student.

Personnel Required for Product Adoption and Implementation

The program was intended for use with 1 teacher for every 20 students in instructional settings. Clerical support needs have been estimated at 1 clerk per approximately 100 students. Translating this into personnel, FTE requires a determination of how much time each student will spend in the program.

ASSURANCES AND CLAIMS

This product has been evaulated during use with over 400 secondary school students, 49 military recruits and approximately 300 prison inmates. In each case, the product functioned as a central element in a basic skills program. The assessment of results was conducted by an internal evaluation staff. Evaluation of the product in a secondary school setting was supervised by the National Institute of Education. This evaluation provided the most extensive source of data on the product. Evaluative evidence was gathered in a rigorous fashion using well-developed designs and instrumentation, and may be accorded high credibility.

Assurances

During the product's use in secondary school contexts, student achievement and attitudes in numerous areas were documented. Practitioners were also frequently consulted concerning the effects of the product on students. In no case were negative effects demonstrated. Thus, there has been no indication that the product induces or facilitates any type of harm.

To assure social fairness, product developers have critiqued their own work; National Institute of Education staff and consultants have reviewed the product; and mechanisms have been employed to obtain user feedback. These sources have not revealed any social bias or stereotyping inherent in the product.

Successful use of the product in a variety of settings has demonstrated its replicability and transportability. Instructional materials are available as a package. To date, technical assistance has been provided to users in implementing the product. Some assistance from the developer is seen as desirable.

Claims

The major outcome claim made for the product is that it facilitates basic skills attainment. This claim has been supported by the evaluation of results from secondary students, military recruits, and prison inmates. In all cases, academic growth has been substantial and statistically significant during the course of product use. Comparative studies with other programs have been limited to date, but suggest that the product is at least as successful as other approaches.

The major process claim made for the product is that it allows students to progress at their own rates through materials which are perceived as beneficial and interesting. This claim was tested using student questionnaires and interviews. Students rated the product as above average on items relevant to this claim.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil prescription sheet	75	9.00	Yearly	
Pupil profile	75	1.50	Yearly	
Cassettes	1 set	50.00	Reusable	
Training materials	2 sets	8.00	Yearly	
Pupil books:				
Level B	720	14.40	Yearly	
Level C	720	14.40	Yearly	
Level D	1,080	21.60	Yearly	
Entrance tests:				
Level A	404	8.08	Yearly	
Level B	752	15.04	Yearly	
Level C	1,586	31.72	Yearly	
Level D	2,268	45.36	Yearly	
Level E	12,394	247.88	Yearly	
Level F	15,804	316.08	Yearly	
Level G	15,676	313.52	Yearly	
Level H	9,628	192.56	Yearly	
Pocket folders	50	10.00	Yearly	Commercial supplier
4-drawer file cabinet	4	400.00	Reusable	Commercial supplier
Accordion folders	300	90.00	Reusable	Commercial supplier
Tape recorders with earphones	4	300.00	Reusable	Commercial supplier

DEVELOPER/AUTHOR:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

AVAILABILITY

The complete *ILA-Communication Skills* program has been available for use since July 1972. Product materials may be obtained from:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 024

BLENDING SOUNDS PARENT TEACHING PACKAGE

A portable package designed to teach the sounds of letters to elementary school children 5-12

Blending Sounds Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to teach children in the elementary grades to "sound out" words. The children will learn to blend sounds into words rapidly without pausing between sounds. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because many children have difficulty learning to read. One of the most difficult, yet essential, skills for those students to learn is how to sound out words and how to blend sounds rapidly enough to make a word.

In this package the student is required to respond to the visual image of the letter(s) by saying the sound of that/those letter(s) as quickly as the student can. As the lessons progress, the student is expected to increase in speed and respond automatically to the letter symbol(s). The speed set for criterion performance is critical. This factor determines the child's ability to blend.

The parent begins by reading the first section of the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The parent studies a sound chart and learns to correctly monitor and imitate the correct sounds for the letters. When the parent knows these sounds, the pretest can be administered to the child to determine which sounds the child knows and which sounds the child does not know. The parent then begins daily lessons using the stack of sounds that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the student saying the sounds of the letter symbols that are known as quickly as possible. A procedure is specified to do so. Each time a row of cards is said, the child is timed. The lesson terminates in approximately 20 minutes, and at that time the parent and student record the best time in reading all of the known sounds on the student progress record sheet (student graph).

SUBJECT AREA(S)

The subject area is reading; specifically, vowel diphthongs, irregular vowels, consonants, consonant digraphs, and short and long vowel sounds; and how to blend these sounds into words.

INTENDED USERS AND BENEFICIARIES

This package is for any student in the elementary grades who does not know how to sound out words or blend sounds into words.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say 71 letter sounds automatically when presented the visual letter symbol and will be able to blend these sounds into words at a rapid rate.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to read and blend the sounds of the visual word units presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the student progress sheet (graph), which requires the parent to indicate how many sounds were read correctly from the known sounds stack and how much time it took the child to read those sounds. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the student progress record sheet is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Blending Sounds Parent Teaching Package* as itemized above is $2.20 (price subject to change). The package is completely reusable except for the graphs (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 67 sound symbol cards	1	1.00	Reusable	
Student graph	1	.05	Consumable each time program is implemented	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.10	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Blending Sounds Parent Teaching Package **has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 025

SOUND SYMBOL PARENT TEACHING PACKAGE

A portable package designed to teach children in the elementary grades to "sound out" words

Sound Symbol Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to teach the sounds of the letters to children in the elementary grades who do not know the sounds of the letters. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because many children have difficulty learning to read. Sound-symbol relationship is a necessary and critical prerequisite skill to learning to read.

In this package the student is required to respond to the visual image of the letter by saying the sound of that letter as quickly as the student can. As the lessons progress, the student is expected to increase in speed and respond automatically to the letter symbols.

The parent begins by reading the first section of the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The parent studies a sound chart while listening to the sound tape or record and learns to correctly monitor and imitate the correct sounds for the letters. When the parent knows these sounds, the pretest can be administered to the child to determine which sounds the child knows and which sounds the child does not know. The parent then begins daily lessons using the stack of sounds that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the student saying the sounds of the letter symbols that are known as quickly as possible. A procedure is specified to do so. Each time a row of cards is said, the child is timed. The lesson terminates in approximately 20 minutes, and at that time the parent and student record the best time in reading all of the known sounds on the student progress sheet (student and parent graph).

SUBJECT AREA(S)

The subject area is reading; specifically, consonants, consonant digraphs, and long and short vowels.

INTENDED USERS AND BENEFICIARIES

This package is for any student in the elementary grades who does not know the sounds of the letters.

RD 030 025

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say 39 letter sounds automatically when presented the visual letter symbol.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult. However, there are some teachers that are using this package with 1st graders as an introductory program to reading.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to read the sounds of the visual symbols presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the student progress sheet (graph), which requires the parent to indicate how many sounds were read correctly from the known sounds stack and how much time it took the child to read those sounds. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the student progress record sheet is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Sound Symbol Parent Teaching Package* as itemized above is $3.25 (price subject to change). The package is completely reusable except for the graphs (which can be reproduced), the letter to the parent, and the evaluation form (which can also be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 35 sound symbol cards	1	1.00	Reusable	
Cassette tape or record	1	1.00	Reusable	
Student graph	1	.05	Consumable each time program is implemented	
Parent graph	1	.05	Same as above	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.10	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Sound Symbol Parent Teaching Package **has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 026

VOCABULARY BUILDING PARENT TEACHING PACKAGE

A portable package to increase the reading ability of students in grades 8-12

Vocabulary Building Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to develop oral reading fluency, word recognition, and word meaning skills of students in grades 5 through 12 who can read at the 4th-grade level or higher. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The package was developed to meet the needs of children who had acquired decoding skills in reading but were lacking in reading speed, vocabulary, and word meaning skills. This package is designed to provide practice in acquiring these skills.

In this package, the student is expected to increase the speed in reading a passage in a book, newspaper, or magazine and to demonstrate knowledge of increased vocabulary and word meaning skills.

The parent begins by reading the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The parent administers the pretest to determine whether the child is able to read at the level required for work on the vocabulary building package. The child reads three 100-word paragraphs and must meet the acceptable time and error criteria to qualify for this package. If the student is reading at the 4th-grade level or higher, the parent begins daily lessons with the student.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the following steps:

1. Parent-child review of words learned on previous days.
2. Child's reading aloud of 100-word selection (self-chosen from book, newspaper, or magazine); underlining of words now known; joint printing of each unknown word on one of the blank cards.
3. Parent's taking one of the written unknown words and teaching the child how to say it.
4. Parent's teaching the child meaning and pronunciation of word if it is unknown.
5. Child's demonstration of word meaning by properly using word in a sentence.

Steps 3-5 are repeated with each word until all 100 words have been taught.

6. Child's oral reading of 100-word selection while parent times the reading and records number of words missed.

The lesson terminates by filling in the progress record form.

SUBJECT AREA(S)

The subject area is reading; specifically, word recognition, word meaning, and oral reading skills.

INTENDED USERS AND BENEFICIARIES

This package is for students in grades 5 through 12 who need improvement in word recognition and word meaning skills and oral reading fluency.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The student will increase in rate, oral reading ability, and word meaning and word recognition skills.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

ASSESSMENT PROVISIONS

Students are administered a criteiron-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to read three 100-word passages. The student must be reading at the 4th-grade level or higher to qualify for the package.

At the completion of each daily lesson, the progress of the student is indicated on the progress record form, which requires the parent to record the initial amount of time it took the student to read the paragraph chosen in the daily lesson and the words underlined. The parent also records the results of Step 6 by indicating the total number of correct and incorrect words. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the progress record form is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Vocabulary Building Parent Teaching Package* as itemized above is $1 (price subject to change). The package is completely resuable except for the progress record form (which can be reproduced), the letter to the parent, the evaluation form (which can also be reproduced), and the blank cards.

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At that time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	.50	Reusable	
Review words envelope	1	.05	Reusable	
Words-learned envelope	1	.05	Reusable	
Set of blank cards	1	.25	Consumable each time program is implemented	
Progress record form	1	.05	Same as above	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.05	Same as above	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Vocabulary Building Parent Teaching Package **has been through formative evaluation. Each package is presently sold at cost of reproduction through:**

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 027

WORD RECOGNITION PARENT TEACHING PACKAGE

A portable package designed to increase the elementary school child's speed in recognizing words that are not possible to sound out

Word Recognition Parent Teaching Package is a portable, self-contained unit of pencil-and-paper format. The purpose of this package is to increase the child's speed of sight words that are not possible to sound out. It is designed to teach one child at a time. It is not intended for group instruction. One lesson is to be taught each day, and the package itself takes approximately 30 or more days to complete.

One of the major problems of teaching rural area children with learning difficulties is the lack of specialized facilities and services. A source of manpower is the child's parents. Providing local teachers and parents with a training program *(Parent Teaching Package)* would allow them to function independently of a centralized facility that would be more in keeping with the fiscal and manpower limits of a greater number of rural school districts. A training model utilizing parents, family members, or close friends, if effective in making the necessary behavior changes, would meet some of the needs of the child, the family, and the school.

The need for this product has arisen because many children have difficulty learning to read. The acquisition of a sight vocabulary is essential if the student is going to learn to read fluently.

In this package the student is required to respond to the visual image of the word by reading the word aloud as quickly as it is possible to respond. As the lessons progress, the student is expected to increase in speed and respond automatically to the sight words.

The parent begins by reading the first section of the parent's manual. The manual trains the parent in the direct teaching of the selected skill, in the supervision of the practice of the skill, in the procedure to monitor the child's progress throughout the package, and in child management skills.

The pretest is administered to the child by the parent to determine which sight words the child knows and which words the child does not know. The parent then begins daily lessons using the stack of words that the child knows.

The daily lesson procedure specifies exactly what the parent is to say and do and specifies what the child is to say and do. Correction procedures are built into each part of the daily lesson. Appropriate troubleshooting phrases are also built into the lesson for the child that does not succeed on the first attempt. For those students who do succeed, task command is followed by specific praise.

The package, which has been programed to stand alone, is a self-contained unit and is being field tested under these conditions. Thus there is no formal training of the parents before they use the product with their own child in the home. The manual is the total training component for both parent and child.

The core of a daily lesson consists of the child saying the known sight words as quickly as possible. A procedure is specified to do so. Each time a row of cards is said, the child is timed. The lesson terminates in approximately 20 minutes, and at that time the parent and student record the best time in reading all of the known sounds on the student progress record sheet (student graph).

SUBJECT AREA(S)

The subject area is reading; specifically, how to respond automatically to phonetically irregular sight words that occur most frequently in reading in the elementary grades.

INTENDED USERS AND BENEFICIARIES

This package is for any student in the elementary grades who has not acquired a basic sight vocabulary.

This package is designed to be used by parents in the home on an individual basis with their child. However, there are many teachers, paraprofessionals, and untrained aides who are using this package in the classroom, both regular and special, and in the resource room.

GOAL(S) OR PURPOSE(S)

The child successfully completing this package will be able to say 100 sight words automatically when presented the visual word unit.

PATTERNS OF USE

The daily lesson format has a direct instructional approach which is to be followed specifically as written in the parent's manual. Everything the parent is to say or do is written precisely and is preceded by a capital "P." Everything the child is to say or do is preceded by a capital "C." The parent is to follow the order of the daily lesson format as indicated. The daily lesson format has been programed to insure that the child obtains maximum success in obtaining the skill. Each step is sequential and should be followed precisely as written.

This package is intended to be used after the teacher has presented the skill in the classroom. The child can benefit from the use of this self-contained package if mastery is difficult.

ASSESSMENT PROVISIONS

Students are administered a criterion-referenced test by the teacher to readily identify which students can benefit from the package. The student is asked to read the words that are presented on a sheet of paper. The student who does not obtain acceptable error and time criteria is placed in the package.

At the completion of each daily lesson, the progress of the student is indicated on the student progress sheet (graph), which requires the parent to indicate how many words were read correctly from the known words stack and how much time it took the child to read those words. This presents both the parent and the student, as well as the teacher, with a record of the child's progress. At the end of the package, the student progress record sheet is sent to the child's teacher.

TIME REQUIREMENTS

This package is intended to be used approximately 20 minutes daily for 4 weeks.

IMPLEMENTATION PROCEDURES

This is a self-contained program which does not rely on special services or facilities for implementation. The teacher who utilizes the product with students and parents in the home should be familiar with the package in order to answer questions the parents might have.

All manuals and progress forms are good black-and-white copies so they may be reproduced by the teachers.

Summary Cost Information

The total cost of the *Word Recognition Parent Teaching Package* as itemized above is $2.50 (price subject to change). The package is completely reusable except for the graphs (which can be reproduced), the letter to the parent, and the evaluation form (which also can be reproduced).

Personnel Required for Product Adoption and Implementation

The package is used in the home with the parent as the implementer of the program. No special training is required of the parent. The only requirement is that the parent read the parent's manual to learn how to implement the program.

ASSURANCES AND CLAIMS

The third year of this project consists of the summative evaluation of all *Parent Teaching Packages.* At this time we will be provided with data through a major field test that will provide us with the information to make such assurances and/or claims. We are in the second year of this project and have just completed the formative evaluation.

RD 030 027

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent's manual	1	1.00	Reusable	
Set of 100 word cards	1	1.10	Reusable	
Student graph	1	.05	Consumable each time program is implemented	
Parent graph	1	.05	Same as above	
Letter to parent	1	.05	Same as above	
Evaluation form	1	.10	Same as above	
Student progress record sheet	1	.05	Same as above	
Record sheets	2	.10	Consumable	

Note: All manuals and progress forms are good black-and-white copies; they can be reproduced by the teachers.

DEVELOPER/AUTHOR:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

Alan Hofmeister, Project Director

AVAILABILITY

Word Recognition Parent Teaching Package has been through formative evaluation. Each package is presently sold at cost of reproduction through:

Instructional Technology Project
Exceptional Child Center, UMC-68
Utah State University
Logan, Utah 84322

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 028

SWRL PROFICIENCY VERIFICATION SYSTEM: READING

A system developed to operate in connection with 10 widely used reading text series

The *SWRL Proficiency Verification System* can be most expeditiously described in terms of the situation in which it will operate. The situation is typical in the schools of the Nation at the present time. An educational agency—a school district most likely, but possibly a State, or a subunit within a district—has adopted two or more text series from which education units may "subadopt" as a basis for instruction. The agency wishes to credit the instructional accomplishments attained by students and teachers with these series and to convey such information in forms that are understandable and useful to school personnel, and also to parents through the teacher and to the community through district officials. The agency also wishes to obtain information for instructional planning purposes regarding the differences in accomplishments with the different series being used within the agency. However, it is immediately within reach of, if not within, the state of the art of educational research and development to satisfy.

The *SWRL Proficiency Verification System: Reading* is initially being developed to operate in connection with all, or a subset of, 10 widely used reading text series. PVS operates as follows: Each participating agency indicates the number of students and school location, and instructional placement of students for each series in use. PVS resources provide text-referenced assessment measures for administration by teachers approximately four times a year, depending on instructional pacing. PVS generates reports for teachers, principals, and district officials crediting instructional accomplishments and summarizing instructional planning data.

PVS resources include operating guides, text-referenced proficiency verification booklets for students, and interpretation guides.

SUBJECT AREA(S)

The subject area is reading, with special emphasis on decoding and comprehension.

INTENDED USERS AND BENEFICIARIES

PVS is being developed for use with all students involved in instruction with the set of instructional products defined by the text series. It is being field tested with a range of different educational situations. PVS provides an operational mechanism for involving parents and community advisory groups as users and beneficiaries of instructional planning information with the professional guidance of educational personnel.

GOAL(S) OR PURPOSE(S)

Agencies participating in PVS receive organized and interpretable information regarding instructional accomplishments. The information is referenced to the specific instructional products that have been procured to provide resources for school personnel to equip students with reading proficiency.

PATTERNS OF USE

PVS assessment measures are referenced to text resources. Thus, PVS is adaptive to the instructional pace at the student, teacher, school, and district levels. An important feature of PVS is that the reports yield systematic information on proficiency rate as well as proficiency substance.

ASSESSMENT PROVISIONS

Assessment is the nuclear core of PVS. The assessment, however, does not reference either abstract "criteria" or "people as products." Rather, it references the instructional products that school personnel use as resources to attain reading proficiency criteria with individual students.

TIME REQUIREMENTS

PVS augments regular classroom instruction. Typically, during the course of 1 academic year, it requires about 2 hours of student time. Special teacher time for PVS operations is negligible. The greatest segment of professional time is devoted to the use of the PVS reports in instructional planning. This time allocation is at the professional discretion of the report recipients.

IMPLEMENTATION PROCEDURES

A comprehensive, self-contained training system is provided. The training system enables district supervisors to assume all responsibility for training teachers and other school personnel in the use of PVS and to conduct this training within the time conventionally available to school personnel.

Installation system materials facilitate the performance of administrative functions related to PVS, for example, suggestions for conducting briefing sessions for school boards, parents, and community members; monitoring the operation of PVS during the school year; reporting pupil proficiency to parents and others interested in the schools; and conducting between-program comparisons.

ASSURANCES AND CLAIMS

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During development, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema and has served to assure user acceptability and product transportability.

The product does not appear to possess bias or imbalance in such areas as sexual stereotyping, cultural and racial diversity, dangerous substances, and religion.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Starter set, including coordinator guide and participation rosters for schools and intraschool units	1 set per participating agency		Yearly	
Training/installation set, including information booklets, operations guides, filmstrips, and audiotapes	Dependent upon number of participating education units in the agency		Reusable	
Classroom set, including PVS booklets and operations record forms	1 set per 30 students per instructional series		Yearly	
PVS reports, generated following computer analysis of data, accompanied with report interpretation guides	Generated for class, school, and district levels at beginning of year, mid-year and end of year.		Archival	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL Proficiency Verification System* is copyrighted and will be available November 1975 from:
SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 029

SYSTEM FOR OBJECTIVE-BASED ASSESSMENT OF READING (SOBAR)

A program to assess the reading level of students in grades K-12

The *System for Objective-Based Assessment of Reading* (SOBAR) is part of a mastery testing program in reading and mathematics. SOBAR helps to identify students' specific reading skill weaknesses and strengths through customized objectives-based tests. To implement SOBAR, a school, district, or State selects the reading objectives most important for the students at a particular level. The importance of the objective is determined by unique aspects of the particular reading program and students.

SOBAR tests are used for pretesting, for posttesting, and as an interim measure at various points during an instructional program. For each testing period, 10 to 40 objectives are selected from a comprehensive collection of all reading objectives. A test is then constructed, "tailor-made" to the specified objectives. The publisher provides three test items for each objective, prepares test booklets, and sends the customized tests and examiner's instructions to the schools. Scoring provides three types of information: Individual student reports, group results, and a distribution of which objectives the students have mastered and which they have not mastered.

SUBJECT AREA(S)

The subject areas are evaluation, language arts (reading), and goal definition. The reading objectives are organized in four major categories: Word attack, vocabulary, comprehension, and study skills.

INTENDED USERS AND BENEFICIARIES

Administrative personnel and teachers at the school, district, State, regional, and Federal levels responsible for decisions concerning resource allocation, classroom management, curriculum planning, and instructional program evaluation in the area of reading are the intended users.

Students of all reading abilities in grades K-12 are the ultimate users and beneficiaries of *System for Objective-Based Assessment of Reading* (SOBAR).

GOAL(S) OR PURPOSE(S)

The purpose of the *System for Objective-Based Assessment of Reading* is to provide assessment instruments relevant to local (or other aggregate) reading programs in order to generate information needed to make decisions concerning resource allocation, classroom management, curriculum planning, and program evaluation and improvement.

PATTERNS OF USE

SOBAR is used for pretesting, posttesting, and interim testing; this could be for programs of varying lengths, hanging from a 1-month teaching unit to a 1-year program. Items not in the system can be added to SOBAR tests, expanding the potential patterns of use to fit user needs.

ASSESSMENT PROVISIONS

SOBAR is an assessment system.

TIME REQUIREMENTS

Time requirements vary depending on the selected pattern of use; students spend from 20 minutes to a maximum of 15 hours per year using SOBAR tests. Administration (proctor or teacher) time is approximately the same as student time. Administrator (decisionmaking) time will vary with each user.

IMPLEMENTATION PROCEDURES

As an optional special service, scoring can be provided by the publisher.

ASSURANCES AND CLAIMS

As in any testing situation, extreme pressure to perform well can cause mental anguish in some students. The user is advised as a normal part of the selection procedure, however, to select objectives at an appropriate level. The flexibility inherent in SOBAR makes it possible to avoid items of extreme difficulty, something that cannot be controlled in traditional achievement tests. This same flexibility—user control of test content—provides assurance of the effectiveness of SOBAR in regard to the appropriateness of test content. Technical accuracy is assured by a thorough development and review process.

Reading passages in SOBAR were developed with the intent of avoiding stereotyped roles of people (e.g., on the basis of age, sex, race, or religion). Reading passages and test items have been reviewed and field tested. To the best of the developer's knowledge, there is no social bias in any of the content.

Administration of SOBAR tests is completely explained in a user's guide as well as in the administrator's copy of each test. No difficulties in test administration have been encountered in the field. Printing, delivery, and scoring of tests are all handled by Science Research Associates, Inc., a well-known and respected educational publisher. No problems of transportability are envisioned with SOBAR.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student test booklet:				
a. custom tests	1 per student	Average .60 per student (minimum order 300.00)	Grades K-2: Replace with each use; grades 3-12: Can be reusable when testing same objectives—then replace approx. every 4th use	
b. catalog tests (predetermined content)	1 per student	Average .45 per student (minimum order 12.50)	Replace approx. every 4th use	
Answer sheets	1 per student	Approx. .01 per student*	Consumable	
Catalog of objectives	1 per 25 students	3.25**	Reusable	
Guide to mastery testing	1 per 25 students	.64**	Replace approx. every 4th use	
Examiner's manual	1 per 25 students	.64**	Grades K-2: Replace each testing; grades 3-12: Replace approx. every 4th use	
Supplemental items:				
Machine scoring and reporting	1 per student	Varies with number of students tested; average .75 per student***		

*No charge if user has SRA score the tests.
**Price, if bought separately. Include in test booklet price if customized booklets are ordered.
***Varies with number of students and/or objectives tested.

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Rodney Skager, Project Director

AVAILABILITY

The 1974 limited copyright will expire in 1984.

SOBAR for grades K-2 will be available in fall 1975; SOBAR for grades 10-12 will be available in fall 1976.

SOBAR for grades 3-8 is available during the 1974-75 school year from:
Criterion-Referenced Measurement Program
Science Research Associates, Inc.
259 East Erie St.
Chicago, Ill. 60611

RD 030 030

COORDINATED HELPS IN LANGUAGE DEVELOPMENT (CHILD)

A teacher's guide to expand the verbal power of kindergarten children

Coordinated Helps in Language Development (CHILD) is a teacher's guide containing 78 activities for increasing abilities of kindergarten children to express themselves by expanding verbal power and linking language and thought. The guide provides the objective for each activity, suggested materials to be used, procedures to be used, and observable expected behaviors which indicate growth on the part of children. A recordkeeping system for the teacher's use is included.

A long-neglected area in oral language is the teaching of guided activities which relate language and thinking. Oral language is a learned skill. As language may be used to express thought and feeling, the reciprocal relationship may also be true. Not only does thinking affect language, but language may affect thinking. Children need to talk about things that require very careful, precise thought so that their language has to accommodate relatively complex ideas.

The language experience approach is used to encourage the child to express thoughts orally by using language and then receiving reinforcement and broader practice through encouragement from the teacher.

The teacher provides stimulation, motivation, and guidance to the children by creating or utilizing learning situations. The teacher, through the questioning strategy, helps children listen attentively, increase vocabulary, extend meanings and language patterns, and express feelings.

The children imitate sounds, use new words, participate in conversations, make comparisons, use synonyms, expand language patterns through use of longer and more complex sentences, and express their feelings.

Sample Lesson

Objective—The child completes riddles which describe six farm animals.

Minimum list—Horse, cow, pig, chicken, duck, and sheep.

The child asks a riddle which gives three clues describing one of the six farm animals listed.

Materials (record kit)—*Sounds I Can Hear*, "Farm in the Zoo."

Procedures—Progress through each procedure in the following order. Pictures may be shown to children having difficulty:

First, ask children to complete riddles. Some examples are:

I swim in the water using my webbed feet. I have feathers on my body. I am a ________________.

I have four legs and a heavy body. My nose is called a snout. The meat I provide is called pork. I am a ____________________.

SUBJECT AREA(S)

The subject area is language arts oral expression.

INTENDED USERS AND BENEFICIARIES

Kindergarten teachers will use the product as a guide. It provides tested learning activities for language development for early childhood, ages 4 to 7. The primary target is kindergarten children.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to improve language ability by: (1) Hearing and imitating sounds of language, (2) increasing vocabulary, (3) extending meaning, (4) extending language patterns, (5) expressing feelings, (6) classifying things, (7) conveying imagination, (8) solving problems, and (9) expressing abstract reasoning.

PATTERNS OF USE

The 78 activities are arranged in categories according to the 9 instructional goals stated above. Although the activities can be used outside of sequence, evaluation and practice are enhanced through sequential use.

ASSESSMENT PROVISIONS

A sample lesson checklist is included. Teachers should use the checklist to record "(x)" for the children who can do the activity and "(o)" for those who cannot do the activity and need additional instruction. Thus, teachers always have an assessment of which children need practice in each activity.

TIME REQUIREMENTS

It is recommended that teachers use language development activities daily, giving all children approximately 20 minutes of concentrated practice, supplemented by incidental practice throughout the day.

IMPLEMENTATION PROCEDURES

The guide is essentially self-contained. Teachers can use it independent of any particular set of materials. However, a bibliography and suggested types of materials are included—such as books, display board, films, science materials, mathematics materials, pictures, commercial materials, and recordings.

ASSURANCES AND CLAIMS

Assurances

The material was examined in-house for social fairness and for psychological harmlessness. In each case, the judgment of the inhouse reviewers was supportive of the materials.

Claims

The results of a comparative test of 100 randomly selected children from 10 treatment classrooms and 90 randomly selected children from 9 nontreatment classrooms, and replicated a year later with a smaller sample, verified significantly superior performance of the treatment group on a 22-item criterion-referenced test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's guide	1 per classroom	5.00	Consumable yearly	

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 S.W. Second Ave.
Portland, Ore. 97204

AVAILABILITY

The product was completed in August 1970 (third printing, August 1973) and available by order from:
Commercial-Educational Distributing Services
P.O. Box 3711
Portland, Ore. 97208

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 031

DIAGNOSTIC AND PRESCRIPTIVE READING INSTRUCTION PROGRAM (DPRI)

A multimedia program to enable teachers to diagnose and correct children's specific reading problems

This is a series of seventeen 1/2-hour color video taped instructional units, with accompanying ancillary and testing materials, designed as inservice training for teachers of reading in grades K-6. The program offers teachers individual experience in diagnosing children's specific reading problems, locating procedures for teaching the needed skills, and suggesting appropriate strategies. Video tapes feature classroom teachers and students illustrating new and innovative teaching techniques in a classroom-oriented atmosphere. Teachers are provided with diagnostic procedures, procedures for connecting diagnosis with prescriptive instruction, and prescriptive instructional techniques.

Five video taped seminars, each with a distinguished panel of authorities in the content area, have also been developed. Seminar discussion centers around problems and questions related to connecting diagnosis with prescriptive instruction.

Included with the video tapes is a packet of ancillary/laboratory materials, including both group and individual activities for participants to complete. Also included are materials for testing participant progress in the content areas covered in the video tapes and ancillary materials; tests include a pretest, unit tests (one for each video tape), midterm, and posttest. Materials are designed to be used in conjunction with video taped instructional units, and can be adapted for use in either group or individual situations.

SUBJECT AREA(S)

Seventeen 1/2-hour video taped instructional units and five video taped seminar discussions comprise a comprehensive training course in diagnostic and prescriptive reading. Title of all video tapes in the series are as follows:

1. DPRI Introduction
2. Informal Tests
3. Standardized Tests
4. Word Recognition Tests
5. Comprehension/Study Skills Tests
6. Miscue Analysis
7. Prescriptive Instructional Systems
8. DPRI Management
9. Reading Readiness - Beginning Reading
10. The Exceptional Reader
11. Word Recognition
12. Vocabulary
13. Study Skills
14. Comprehension
15. Reading in Content Fields
16. Developing Life-Long Readers
17. Total Reading Program

Seminars are not titled, but are video tapes of live presentations following programs 3, 7, 11, 16, and 17 above.

INTENDED USERS AND BENEFICIARIES

The program is designed specifically for all teachers of reading in grades K-6. Ultimate beneficiaries are those students who will benefit from the increased competencies of their teachers in the teaching of reading skills.

GOAL(S) OR PURPOSE(S)

The reading teacher who successfully completes the *Diagnostic and Prescriptive Reading Instruction Program* will be able to diagnose children's specific reading problems, locate procedures for teaching the needed skills, and implement appropriate instructional strategies.

PATTERNS OF USE

The DPRI program was designed as a comprehensive sequential series comprising a course in teaching reading skills. However, as a training program, the materials can be used either independently or together as an inservice program, as part of an inservice program, or as a complete course.

ASSESSMENT PROVISIONS

Teachers participating in the DPRI program are given a pretest to measure entry-level competencies; this test can also serve as a posttest. Also provided are unit tests (for each video tape in the series), as well as a midterm test.

TIME REQUIREMENTS

Each video taped instructional unit is 30 minutes in length; seminars are 60 minutes in length. Ancillary/laboratory materials accompanying each video tape will require an average of 2 hours for completion.

IMPLEMENTATION PROCEDURES

A video cassette player is necessary in order to show video tapes. Standard format of tapes is 3/4 inch video cassette.

DPRI program and materials are designed to be primarily self-instructional. The program does not require a specialist teacher. Instructional units may be presented in a small-group situation or in an individualized situation. No organizational changes would be necessitated in existing school structures for effective use of this product.

Video cassettes are reusable over a long period of time. The only consumables are the packet of ancillary materials, textual items (minimal), and written tests for each participant.

ASSURANCES AND CLAIMS

This product has been used with approximately 600 educators throughout 8 States. In addition, the State of Tennessee has adopted the product as inservice training for all teachers of reading in grades K-3. The product is transportable. Materials can be used effectively without the presence of a specialist teacher, without detracting from the quality of instruction presented.

Materials do not appear to display any form of social bias, including ethnic or sexual stereotyping.

The developers have not received any reports of harm associated with the use of this product.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Video cassette - Instructional units	17	25.25	Reusable	ARC
Video cassette - Seminars	5	35.24	Reusable	ARC
Ancillary materials packet	1 per participant	6.50	Consumable with each use	RCC
Pretest	1 per participant	2.50	Consumable with each use	RCC
Unit test	1 per tape (17)	2.50	Consumable with each use	RCC
Midterm	1 per participant	2.50	Consumable with each use	RCC
Posttest	1 per participant	2.50	Consumable with each use	RCC

DEVELOPER/AUTHOR:

Appalachian Regional Commission
1666 Connecticut Ave. NW.
Washington, D.C. 20235

College of Education and Division of Media Services
University of Kentucky
Lexington, Ky. 40506

AVAILABILITY

The total DPRI program (including video cassettes of programs and seminars, ancillary materials, and testing materials) is currently available from the distributors.

Video cassettes of programs and seminars are available from:

Appalachian Regional Commission (ARC)
1666 Connecticut Ave.
Washington, D.C. 20235

Ancillary/test materials are available from:
Resource Coordinating Center (RCC)
306 Frazee Hall
University of Kentucky
Lexington, Ky. 40506

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 030 032

MINICOURSE 2: DEVELOPING CHILDREN'S ORAL LANGUAGE

*A multimedia program to train teachers of grades K-3
to help students speak and think with more precision
and flexibility*

Minicourse 2: Developing Children's Oral Language trains teachers in using strategies to help children learn to speak and think with more precision and flexibility. The minicourse format, developed by the Far West Laboratory, is an attempt to allow teachers to "learn by doing." Instead of telling them what to do, the minicourse shows them what to do and, through microteaching, provides the opportunity for them to practice what they are learning and to observe and evaluate themselves. The minicourse format thus permits the course developers to focus on specific skills rather than on broad, general statements of how to improve teacher methods. Microteaching, in which teachers are video taped while practicing a lesson segment with a small number of students, was pioneered in the Stanford University intern program. Results to date have shown it to be more successful in training intern teachers than conventional training.

The instructional format for each sequence follows this pattern. A trainee will: (1) Read the appropriate section in the teacher's handbook, (2) view an instructional film and a model lesson film, (3) plan a 10- to 15-minute microteach lesson to be taught to four or five students, (4) microteach the planned lesson while video taping or audiotaping it, and (5) view or listen to the tape to evaluate one's own performance. (The minicourse permits teachers to evaluate themselves or be critiqued by colleagues rather than by supervisors.) The teacher replans the same lesson, reteaches and retapes it with a different group of students, and then reevaluates the performance. The materials of Minicourse 2 consist of the instructional films and teacher's and coordinator's handbooks.

SUBJECT AREA(S)

The subject area is inservice or preservice teacher training in language development. The teachers are trained in skills that will help children learn to use more precise and complex language.

INTENDED USERS AND BENEFICIARIES

Teachers in grades K-3 and teachers in grades 4-6 whose pupils speak English as a second language are the intended users.

GOAL(S) OR PURPOSE(S)

In preparing the course, the developers drew on the work of learning theorists to identify fundamental teaching behaviors that encourage language and thought development in children. In *Minicourse 2*, teachers are trained in teaching behaviors deemed critical to promoting language development in children with minimal language experience. These are defined as (1) expanding the complexity, flexibility, and preciseness of language and thought; (2) modeling new language patterns; (3) eliciting children's use of new language; and (4) providing specific praise for use of precise language.

PATTERNS OF USE

Minicourse 2 is an autoinstructional package. It consists of six 16mm color films, a teacher's handbook, and a coordinator's handbook. The four basic teaching behaviors are introduced in the first two sequences, and practice in applying them to teaching specific language skills follows in the remaining three sequences.

ASSESSMENT PROVISIONS

Teachers volunteer to take *Minicourse 2*. Teachers evaluate themselves using self-evaluation forms provided in the teacher's handbook. Teachers may choose to ask a colleague or supervisor to critique their microteach sessions, but it is not required.

TIME REQUIREMENTS

Four hours per week, for 5 weeks, 2 days per week for preparation, and 2 days for microteaching.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model films to participating teachers. A room to be equipped with the video taping equipment and seating for the teacher and four to five students should be set up and made available for microteaching.

The coordinator schedules the participating teacher's use of the microteaching room and should arrange for someone to relieve the teacher from regular classroom duties during microteaching.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide a 20-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Participants in the main and operational field tests of *Minicourse 2* noted no detrimental effects of any course materials. Eighty-one percent of the teachers who participated in the operational field test felt that this minicourse was better than other inservice training they had taken, and 88 percent indicated the course was an improvement over their preservice training.

Minicourse 2 was field tested four times during its development. A preliminary test in May 1968 resulted in major revisions, and a new preliminary test was conducted that summer. Eight teachers participated. The main field test was conducted with 42 kindergarten teachers; 14 from Monterey, California; 16 from Watsonville, California; and 12 from Philadelphia, Pennsylvania. The socioeconomic status of these sites ranged from middle to lower class; and their ethnic representation included Afro-American, Phillipine-American, Mexican-American, and Anglo-American. Forty-eight teachers from nine sites participated in the operational kindergarten or preschool field test.

Data collected from the main field test showed *Minicourse 2* to be effective in training teachers in the target skills. Teacher use of extending phrases to sentences increased by 60 percent. Instances of refining meaning increased from an average of 0.95 occurrences to an average of 2.39. Significant gains were made in teacher use of specific praise, modeling specific positions words in context, eliciting observations of similarities and differences among objects, and providing language patterns for expressing comparisons. Gains were made in teacher use of action words: Verbalizing action in context, introducing other actions that illustrate the verb, and eliciting the use of the modeled verb.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,400.00*	Reusable	
Teacher's handbook	1 per teacher	3.00	Consumable	
Coordinator's handbook	1	4.00	Reusable	
20-min. blank video tape	1 per teacher	22.00	Annually**	Any commercial dealer

*Instructional films may be purchased or rented for 6 weeks for $210.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about five times; each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Beatrice A. Ward, Marjorie A. Kelley, Authors

AVAILABILITY

Minicourse 2: Developing Children's Oral Language was published in 1971 by MacMillan Educational Services, Inc., Beverly Hills, California, copyright 1971 by Far West Laboratory for Educational Research and Development. Copyright is claimed until November 15, 1981.

Requests for preview materials and information regarding purchase or rental should be addressed to the distributor:

The Macmillan Company
Front and Brown Sts.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

MINICOURSE 18: TEACHING READING AS DECODING

A self-instructional training sequence for teachers of beginning readers in grades K-3

Minicourse 18 is a self-instructional training sequence for teachers of beginning reading (grades K to 3) and for teachers of remedial reading through grade 6. The minicourse format, developed by the Far West Laboratory for Educational Research and Develpment, is an attempt to "learn by doing," instead of telling them what to do. The minicourse shows them what to do and, through microteaching, provides the opportunity to practice what they are learning and to observe and evaluate themselves. The minicourse format thus permits the course developers to focus on specific skills rather than on broad, general statements of how to improve teacher methods. Microteaching, in which teachers are video taped while practicing a lesson segment with a small number of students, was pioneered in the Stanford University intern program. Results to date have shown it to be more successful in training intern teachers than conventional training.

Decoding is defined in *Minicourse 18* as "translating written symbols into the speech sounds (the learner) already knows." Approximately 50 selected teaching strategies in 5 levels of skills of increasing complexity, all considered necessary to decoding, are justified, explained, demonstrated, and practiced through a coordinated, self-contained course. The developers state that the skills selected for the course are those that are considered critical to the decoding process, as determined by research and by the thinking of professional linguists. Not all of the skills involved in decoding are included (the developers have been selective) but those that are presented are intended to be useful with the wide variety of methods and materials used throughout the country. The five instructional sequences of the course teach procedures for helping children to recognize graphemes (letters); make grapheme/phoneme (sound) correspondences in consonant letters; make grapheme/phoneme correspondences in larger spelling units, including similar and contrasting words using "problem-solving techniques;" that is, attacking new words with any or all of the decoding skills learned. There is, in addition, one video taped review lesson. Two interesting features of the course are descriptions of ways to respond to errors that pupils make, and filmed segments of "negative behaviors" that teachers should avoid, each followed by the corresponding correct technique.

SUBJECT AREA(S)

Inservice or preservice teacher training in teaching decoding. Teachers learn techniques for teaching children to match like graphemes; to locate grapheme in initial, final, and medial position; to make grapheme/phoneme correspondences of "regular" and "irregular" consonants; to make grapheme/phoneme correspondences in similar spelling patterns, and bound morphemes; to use syntactic and semantic clues to decode words; and to use "problem solving" to decode unfamiliar words.

INTENDED USERS AND BENEFICIARIES

Teachers of beginning reading, grades K to 3, and of remedial reading, up to grade 6.

GOALS OR PURPOSES

To increase teachers' skills in the use of teaching processes proven effective for building pupils' decoding skills.

PATTERNS OF USE

To use the minicourse, teachers must practice (microteach) the procedures using either a small group of children from their own classes or another class as subjects who need instruction in the skills of the given lesson. Diagnostic tests for determining pupil skill level are provided. In addition, forms for planning and evaluating each microteach segment are included in the teacher handbook.

The activities for five instructional sequences, each representing one level of decoding skills, are divided into 5- or 6-day blocks: On the first day teachers are to read the appropriate chapter in the teacher handbook; view the video taped demonstration lessons and plan the first 10- to 15-minute microteach lesson on the second day; microteach, view, and evaluate the taped segment, and plan the second microteach on the third day; on the fourth, microteach, evaluate, and plan the third practice segment; on the fifth, microteach and evaluate and, if necessary, plan the followup lesson; the last day, teachers are to conduct and evaluate the followup lesson and read the next chapter in the handbook.

The five instructional sequences are presented in order of increasing complexity; however, use in class of the procedure taught in the course depends on the needs of individual classes and children. The trainee is expected to be familiar with the written material and to follow the lesson procedures as outlined. There is no evidence that course materials are effective when used separately.

ASSESSMENT PROVISIONS

Teachers volunteer to take *Minicourse 18* training. The course is self-instructional using written materials, filmed demonstration lessons, microteaching, and self-evaluation procedures. Groups of teachers may discuss the written material and view the filmed lessons together, and may even evaluate each other if they wish, but the microteaching must be done individually.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model films to participating teachers. A room equipped with the video taping equipment and seating for the teacher and four or five students should be set up and made available for microteaching.

The coordinator schedules the participating teachers' use of the microteaching room and arranges for someone to relieve the teacher from regular classroom duties during microteaching.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook as consumable evaluation forms and checklists are provided therein. The teachers resource kit may be shared by all teachers sharing the microteach room (not more than 10). Initially, the school or district should provide a 20-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

The minicourses are designed to be used with video tape equipment so that teachers can see themselves perform. However, this minicourse can use a regular audiotape recorder instead of the video taping equipment. Through field testing, the Far West Laboratory discovered that for this particular course the use of tape recordings proved as effective as video tapes. Districts for which the purchase of a video taping system would be a financial burden may choose to use audiotaping.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Minicourse 18 was field tested in suburban and inner-city schools with 56 teachers. The course was proven to be effective for both, suggesting the course be offered to a wide range of teachers.

The literature on teaching reading as decoding was reviewed prior to the design of the course. *Minicourse 18* was developed on the basis of this literature review. A total of more than 187 studies and articles was reviewed. The course underwent careful testing and development before release in its final form. The main field test data suggest that the course was effective in changing teacher behavior. Teacher behavior changed in course-approved directions in 24 out of 29 of the behaviors explicitly taught in the course.

Independent use of the course without direct developer assistance occurred in Montgomery County, Md., Chicago, Ill., and Washington, D.C., thus proving the replicability and transportability of the course.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,200.00*	Reusable	
Teacher's handbook	1 per teacher	4.00	Not reusable	
Coordinator's handbook	1	4.00	Reusable	
Teacher's resource kit	1 set	35.00	Reusable	
20-minute video tapes	1 per teacher	22.00	Annually**	Any commercial dealer

*Films may be purchased or rented for $210 for 6 weeks.

**A video tape can be recorded, erased, and re-recorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about 5 times. However, each teacher taking the course needs a tape.

DEVELOPER/AUTHOR

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Beatrice A. Ward, Author
Dawn B. Skailand, Author

AVAILABILITY

Minicourse 18: Teaching Reading as Decoding was published in 1973 by Macmillan Educational Services, New York. Copyright is claimed until April 1983 by Far West Laboratory for Educational Research and Development.

For preview of the course materials or information regarding purchase or rental, contact the distributor:
The Macmillan Company
Front and Brown Sts.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 034

MINICOURSE 22: TEACHING READING COMPREHENSION

A teacher training sequence to improve student comprehension in the reading process

Minicourse 22: Teaching Reading Comprehension was planned to complement *Minicourse 18: Teaching Reading as Decoding*. With both minicourses released, preservice and inservice teachers will be able to learn the skills and strategies required for teaching both the decoding (pronouncing) and the comprehension (understanding meaning) components of the reading process.

Reading comprehension is defined in this course as the grasping of the meaning of written material (literal comprehension) and the mental processing of that meaning, including the ability to analyze, synthesize, make inferences and draw them from personal experience, compare, evaluate, interpret, draw conclusions, appreciate, and apply.

The course is built upon the same instructional principles as other minicourses developed by the Far West Laboratory. The teacher trainee reads a lesson dealing with a specific skill, watches a film or videotape which offers more instruction or a modeling of the skill, practices the skill with a small group of pupils (microteach), and then evaluates use of the skill as demonstrated on a videotape or audiotape recording of the microteach session.

SUBJECT AREA(S)

Inservice and preservice teacher training in teaching reading comprehension.

INTENDED USERS AND BENEFICIARIES

The course is developed in modules; some are appropriate for primary grades and others are appropriate through grade 12.

GOAL(S) OR PURPOSE(S)

The course has been developed only in preliminary form. There are to be six modules. The five topics which have been developed are: (1) Beginning reading comprehension, to develop skill in establishing for pupils the link between the oral and printed forms of words (grades K to 1, 2 weeks); (2) providing interesting reading material for pupils to identify their reading interests and to provide materials appropriate to those interests (grades K to 9, 1-1/2 weeks); (3) providing questions to build reading comprehension, to build skill in framing questions on four levels of comprehension, and to lead pupils to ask questions about reading materials (grades 1 to 8, 2-1/2 weeks); (4) building meaning for linguistic units—sentences, words, paragraphs, selections—to develop skill in helping pupils extract meaning from printed linguistic units (grades 2 to 9, 4 weeks); and (5) providing purposes and skills for reading to develop skill in helping pupils learn the behaviors necessary for meaningful reading (grades 5 to 12, 5 weeks).

Module 6, measuring reading comprehension, had not yet been developed when work on this course was discontinued.

PATTERNS OF USE

The six modules are designed to be used independently or in combination with others. Each is self-contained, with its own procedures for self-selection and pretesting.

ASSESSMENT PROVISIONS

All modules are self-instructional. Teachers choose to take this course, and supervision is neither required nor suggested. Self-evaluation forms are included in the Teacher Handbook.

TIME REQUIREMENTS

Each module has a different time requirement. See "Goal(s) or Purpose(s)."

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the 16mm instructional/model films to participating teachers. A room having videotaping equipment and seating for the teacher and five students should be set up and made available for microteaching.

A staff member or the coordinator should be made available to relieve a teacher who is scheduled to microteach during class time.

MATERIALS AND EQUIPMENT

Work on this course was discontinued after preliminary development. Instructional materials include teacher's handbooks and instructional/model videotapes. This course follows the minicourse format developed by the Far West Laboratory. The final product would be composed of instructional/model films, teacher's handbooks, and a coordinator's handbook. Each teacher participant would need a video tape or audiotape system to record through sessions.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

No assurances of product effectiveness can be made at this point in the development of the course. The preliminary field test of each module was conducted independently with a small number of teachers. The purpose of this small preliminary test was to determine the usefulness of certain skills and whether they should be incorporated into the main version of the materials. These preliminary results indicated that the skills taught in the course had value to teachers and further development was recommended.

The development of this course began with a literature review of more than 200 sources related to various aspects of reading comprehension. From these abstracts, the development team identified the six modules of the course.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Dawn Skailand, Author

AVAILABILITY

Work on this course was terminated at the preliminary development stage. Reactions from field-test participants and consultants strongly indicate a need for further development of this course.

Further information regarding *Minicourse 22* may be requested from the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 035

AIDS TO CURRICULUM PLANNING: ENGLISH LANGUAGE ARTS K-12

A set of aids which are excerpts of representative curriculum guides

The aids in this paper consist of excerpts of curriculum guides that are representative models for sections of the *Criteria for Planning and Evaluation of Curriculum Guides*. The criteria were established by the National Council of Teachers of English Committee on Curriculum Bulletins and were designed to facilitate the planning and evaluating of curriculums. These aids are intended to provide curriculum guide developers with a model, to present useful units to the classroom teacher, and to be used as reference material in college classes. Each of the seven sections in the book (philosophy, objectives, language, composition, media, reading and literature, and evaluation) is preceded by an explanation of criteria. Most sections include a model excerpt from an elementary, secondary, and total K-12 curriculum guide.

SUBJECT AREA(S)

Criteria, curriculum development, curriculum evaluation, curriculum guides, curriculum planning, elementary education, English instruction, language arts, and secondary education

INTENDED USERS AND BENEFICIARIES

The intended users of this book are the English language arts and curriculum builders—State and school systems and classroom teachers.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 085 697, $0.76 (microfiche), $8.24 (paper), add $0.34 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available at a cost of $4.95 for nonmembers and $4.50 for members. Order Catalog No. 00233:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF APRIL 1975 ■

ALTERNATIVES IN ENGLISH: A CRITICAL APPRAISAL OF ELECTIVE PROGRAMS. ERIC/RCS INFORMATION ANALYSIS SERIES: GROUP I

A study of elective programs in English curriculums of American high schools during the last decade

An appraisal of elective programs in the English curriculums of American high schools during the last decade is presented in this paper. Elective courses are defined as programs at one or more grade levels which allow students to choose courses that appeal to them from a wide variety of offerings. The study is based on data from over 100 programs in 37 States. The examination proceeds from a discussion of the rationales for these programs to examinations of program structures, patterns of course offerings, course designs, and methods and results of evaluation. It concludes with a discussion of some of the important problems and promises of elective programs. Also included are a bibliography; a list of schools contributing program guides, questionnaire responses, and/or other materials; a list of schools to contact for information about their elective programs; and a copy of the questionnaire that was sent to the department chairperson participating in the study.

SUBJECT AREA(S)

The subject areas are composition (literary) elective subjects, English curriculum, English literature, English programs, high school curriculum, humanities instruction, individualized curriculum, language arts, literary genres, mass media, Negro literature, secondary school students, secondary schoolteachers, student-centered curriculum, student interests, and thematic approach.

INTENDED USERS AND BENEFICIARIES

All persons concerned with the teaching-of-English profession, particularly English teachers and curriculum planners at the secondary school level, are the intended users of this program.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 068 951, $0.76 (microfiche), $8.24 (paper), add $0.34 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer at a cost of $2.45 for members and $2.75 for nonmembers. Order Catalog No. 00251.

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 030 037

COMMUNICATION SKILLS ORIENTED CURRICULUM GUIDE

A program aimed at organizing the communication skills of students in grades K-12

To date, communication skills lists have been developed for grades 1 to 4. Each grade level skills list includes the areas of:

1. Reading skills
2. Written communications
3. Oral communications
4. Language skills for grades 2 to 4.

Each list identifies competencies which can be:

1. Mastered by the majority of the class
2. Mastered by some of the class
3. Mastered by very few students—some having familiarity with the skills.

SUBJECT AREA(S)

Language arts is the subject area.

The purpose of this guide is to organize, on a grade-by-grade basis, the various communications skills to which students should be introduced as they progress in the language arts area: Kindergarten through grade 12.

INTENDED USERS AND BENEFICIARIES

The K-12 guide is being developed for use by union 58 teachers in classrooms with students. Working with the component coordinator, teachers have been directly involved in identifying those communications skills and levels of competency which are applicable to their respective grades.

GOAL(S) OR PURPOSE(S)

The major goal is to develop a K-12 integrated and sequential language arts curriculum which provides students with continual learning and skills development opportunities.

PATTERNS OF USE

Once developed, field tested in classrooms, and revised (if necessary), grade level skills lists will be compiled into a K-12 communications skills oriented curriculum guide.

Copies of the guide will be given to union 58 schools in Groveton, Stark, and Stratford, New Hampshire. Teachers will be responsible for planning their classroom language arts programs in accordance with the skills guide content which is appropriate to their grade levels.

Working with the component coordinator, teachers will use the skills guide for purposes of developing objectives, activities, and evaluation strategies.

ASSESSMENT PROVISIONS

Within the near future, skills lists which have been developed for grades 1 to 4 will be field tested in union 58 classrooms. The feedback from teachers will form the basis for product refinement and revision (if necessary). A similar procedure will be used with other grade-level skills lists (5-12) as they are developed.

TIME REQUIREMENTS

The individual classroom teacher will determine the amount of time that is required for the development of skills in each classroom. The amount of time required for skills development in each grade will be, in part, determined by the abilities of students.

IMPLEMENTATION PROCEDURES

Teachers and the component coordinator develop skills lists for K through 12th-grade students. Each list is introduced into classrooms on a trial basis. Feedback is obtained from teachers who have used the lists for purposes of product refinement and revision (if necessary).

When all grades have developed and tested lists, the finished product will be compiled into a guide and given to Union 58 teachers for further development (objectives, activities, and evaluation strategies).

MATERIALS AND EQUIPMENT

As the skills listed are introduced and tested in union 58 classrooms, teachers will begin to identify those instructional materials that are required in order to implement "guide-related" objectives, activities, and evaluation strategies.

Initially, teachers will work with the materials and equipment found within the schools such as books, language master machines/programs, and listening stations. As a result of skills guide implementation in classrooms, teachers will be in a better position to identify additional materials and equipment.

Since classroom teachers have been involved in developing the grade level skills lists, the product content should relate to the abilities and skills of the "average" classroom teacher (at specific grades). In the majority of cases, there would not be any need for elaborate or technical training. In those instances where introductory training is needed, teachers can be involved in inservice workshops or short-term training sessions.

ASSURANCES AND CLAIMS

Assurances

To date, the Experimental Schools Program (ESP) project staff and Union 58 teachers have developed communication skills lists for grades 1 to 4. Shortly, these skills lists will be introduced into classrooms for purposes of implementation and evaluation—on a trial basis. The feedback gained from classroom teachers will provide the basis for refinement and revision (if necessary).

At this time, the Union 58 project cannot claim avoidance of risk and/or minimal comparative quality. The product has been developed with all students in mind. There has not been any intention to develop a sexist program. Both boys and girls are to be involved in learning and skills development activities.

Claims

There are no data available at this time which would enable the Union 58 ESP project to make claims of effectiveness, social fairness, or product development regarding the communication skills-oriented curriculum guide.

DEVELOPER/AUTHOR:

New Hampshire School Supervisory Union 58
Experimental Schools Program
Groveton Elementary School
Groveton, N.H. 03582

Gordon Schnare, Coordinator
Union 58 Teachers

AVAILABILITY

The original intention of the Union 58 ESP project was to develop a continual, integrated, and sequential language arts program for grades K-12. This remains one of the project's prime objectives.

At present, the component coordinator is working with classroom teachers (in an ongoing process) to develop skills lists for each grade. Once developed, field tested, evaluated, and refined, the grade level lists will be compiled into a K-12 curriculum guide.

The product has not been totally developed, to date, nor has any part of it been copyrighted. Samples of the skills lists developed as of March 1975 are available from the School Supervisory Union 58 of the Experimental Schools Program as follows:

Experimental Schools Program
Groveton Elementary School
Groveton, N.H. 03582

INFORMATION CURRENT AS OF MARCH 1975 ■

READING AND
LANGUAGE ARTS

RD 030 038

LANGUAGE LEARNING, LANGUAGE DEVELOPMENT: A BIBLIOGRAPHY

A reference to materials on language development and language learning for preschool children

This bibliography includes references to materials on language development and language learning in young children—from infancy through the earliest school experiences. Topics included are receptive, communicative, and expressive language as well as particular aspects of language imitation and production. Entries are from many sources, including *Resources in Education* (RIE) and *Current Index to Journal in Education* (CIJE).

SUBJECT AREA(S)

Subject areas of documents cited in this bibliography include: Language development, oral language curriculums, family interaction patterns affecting language development, and measures of early language functioning.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to provide early childhood teachers, program consultants, researchers, and parents with current references to language learning and language development. It is also of interest to social workers, psychologists, and students.

GOAL(S) OR PURPOSE(S)

The purpose of this bibliography is to provide references to current research reports, program descriptions, reports of social interaction patterns in the family, and measures of language function in response to continued requests for information on language development.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Alice Sterling Honig, Compiler

AVAILABILITY

Order number ED to be assigned.
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer, catalog No. 126 (in preparation).
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

MISCUE ANALYSIS: APPLICATIONS TO READING INSTRUCTION

A series of essays on the subject of miscue analysis

This monograph is a series of essays on the subject of miscue analysis, a diagnostic procedure rooted in the psycholinguistic view of reading. The focus of miscue analysis is on the broad field of reading comprehension rather than the isolated decoding of individual words and letters. The contents of this book include: "Introduction" by Rosemary Winkeljohann; "Miscues: Window on the Reading Process" by Kenneth S. Goodman; "Miscue Analysis for In-Service Reading Teachers" by Yetta M. Goodman; "Miscue Analysis and the Training of Junior and Senior High School English Teachers" by Jay B. Ludwig and James C. Stalker; "The Module and Miscue" by Jayne A. DeLawter; "Clinical Uses of Miscue Research" by William D. Page; "Building Instructional Materials" by Laura A. Smith and Margaret Lindberg; "Miscues of Non-Native Speakers of English" by Catherine Buck; "Using Miscue Analysis to Advise Content Area Teachers" by Ernie Nieratka; "Miscue Analysis in a Special Education Resource Room" by Suzanne Nieratka; and "Helping the Reader: From Miscue Analysis to Strategy Lessons" by Dorothy Watson. A bibliography is also included. (See ED 058 008, ED 039 101, and CS 000 667 for related documents.)

SUBJECT AREA(S)

Subject areas are developmental reading, oral reading, reading, reading comprehension, reading development, reading diagnosis, reading improvement, reading instruction, reading materials, reading processes, reading research, and reading skills.

INTENDED USERS AND BENEFICIARIES

The intended users of this book are elementary teachers.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. 080 973, $0.76 (microfiche), $5.74 (paper), add $0.34 (postage). Order from:

ERIC Document Reproduction Service
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Arlington, Va. 22210

Copies are also available for $2.50 (nonmembers) and $2.25 (members), stock No. 03677.

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 030 040

RECOMMENDED ENGLISH LANGUAGE ARTS CURRICULUM GUIDES K-12 AND CRITERIA FOR PLANNING AND EVALUATION, 1974

An annotated list of curriculum guides for schools revising their language arts programs

This document contains an annotated list of curriculum guides which may serve as models for schools revising their programs and seeking a variety of sample frameworks, units, and lesson plans. The guides are taken from those sent to the National Council of Teachers of English during the past 3 years. Most of them are available for purchase from the schools and agencies responsible for producing the guides. Many are also available from the ERIC Document Reproduction Service (EDRS). The revised criteria for the planning and evaluation of English language arts curriculum guides are also included. These criteria include an evaluation of each guide's philosophy, policies and procedures, objectives, organization, and process as content. They also deal with the guides' design and treatment of language, composition, media, reading and literature, and evaluation.

SUBJECT AREA(S)

Language arts, curriculum guides, curriculum evaluation, elementary education, secondary education, educational resources, curriculum development, English programs, and English curriculums.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are English supervisors, language arts coordinators, curriculum directors, curriculum committees, and teachers in general.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 096 692, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer at a cost of $0.75 for nonmembers and $0.65 for members, prepaid (Catalog No. 00340).

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 030 041

TEACHER EFFECTIVENESS IN ELEMENTARY LANGUAGE ARTS: A PROGRESS REPORT

A survey of recent research on teacher behaviors associated with pupil "success"

This survey of recent research on teacher behaviors probes seven areas of elementary language arts teaching: Teaching linguistics to elementary and preschool children, teaching listening skills to children in the elementary school, teaching literature to children, children's oral language/speaking, reading instruction, spelling instruction, and the teaching of writing. Answers were sought to these questions: (1) Which teaching behaviors are associated with pupil "success" as defined in the respective studies? and (2) How can one identify and describe these activities in the classroom milieu? It was concluded that gaps exist in the crucial area of "precise activities at points of interaction between teacher and pupil." In addition to sections reporting on each of the seven areas probed, the book includes "Plan for a Five-Phase Study of Teaching Effectiveness," "Criteria of Excellence in Teaching the Language Arts," "Evaluative Instruments and Pertinent Research," and "A Forward Look." The book is being used in teacher training institutes.

SUBJECT AREA(S)

Composition (literary), educational research, effective teaching, elementary education, language arts linguistics, listening skills, literature, oral expression, reading instruction, spelling instruction, teacher behavior, and teaching methods.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are decisionmakers, teacher trainers, administrators, and school boards of education.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 089 317, $0.76 (microfiche), $5.70 (paper), add $0.26 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available, at a cost of $2.25 for nonmembers and $2 for members. Order Catalog No. 14282:
National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF APRIL 1975 ■

OVERVIEW

AUDREY B. CHAMPAGNE
Co-Director
Individualized Science Program
Learning Research and Development Center
University of Pittsburgh
Pittsburgh, Pennsylvania

and

LEO E. KLOPFER
Research Associate
Learning Research and Development Center
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The ability to think and reason is the most distinctive characteristic of the human species. It is this ability, more than any other, that has made it possible for human beings to survive in the struggle for existence and to control, in large measure, their environment. This being the case, one might expect that the development of the ability to reason would be the primary emphasis of the human species in transmitting its heritage to its youngsters through their education in the schools. In actuality, however, school instruction in the United States prior to the second decade of the present century rarely gave systematic attention to developing children's ability to reason and to solve problems. Even today, the development of children's reasoning and problem-solving skills can hardly be said to be the central concern of most schools.

This is not to suggest that there has been a lack of research concerned with reasoning and problem solving, nor that there has been a dearth of ideas for techniques and procedures to develop children's skills in this area through their school experiences. On the contrary, there is considerable research activity and pedagogical discussion concerning reasoning and problem solving so that a considerable body of literature has accumulated.[1] Only some highlights of that large literature can be conveyed in this brief overview of how reasoning and problem solving are related, and how children's skills therein may be developed in school classrooms.

The relationship that exists between reasoning and problem solving is exemplified in the work of Jean Piaget, the Swiss genetic epistomologist, who for nearly half a century has engaged in research to broaden our understanding of the question, "How does knowledge grow?" One facet of Piaget's inquiry into this question has been to study the development in humans of the ability to reason, to incorporate a system of logic into their thinking.[2]

Piaget assesses the extent of an individual's ability to apply logical processes by presenting the individual with problems to solve. For the infant, a typical problem might be to find a toy hidden under a pillow. An eight-year-old might be asked to compare the areas of a square and a rectangle whose perimeters are equal. A problem appropriate for a teenager might be to predict the level of water in the left side of a U-tube when water is added to the right side. Piaget and his coworkers have confronted hundreds of children with these and other problems drawn from science and mathematics. The responses to the problems children give and the reasons for their responses are carefully analyzed to determine what logical processes underlie the responses and reasons given. A child's ability to think logically, i.e., to reason, is assessed by the extent to which his or her answers reflect the tenets of a system of logic.[3] Hence, the Piagetian problems serve as probes into the ability of children to reason.

The work of Piaget has provided educators with both descriptive information and a theory of how the ability to reason develops over time.[4] The descriptive information has great potential value to educational practitioners. It offers teachers a tool they can use to understand better how their students are reasoning and why students of a given age give the kinds of responses to questions that they do. It informs curriculum developers about the kinds of manipulative and cognitive activities that are appropriate for children at different levels of cognitive development. Piaget's theory, which describes

Dr. Audrey B. Champagne and Dr. Leo E. Klopfer are currently engaged in the development of an Individualized Science *curriculum series at the Learning Research and Development Center. One objective of the curriculum is the development of pupil reasoning and problem solving skills.*

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[1] One indication of the vastness of the reasoning and problem-solving literature is this: a computer search of the ERIC files, using "reasoning" and "problem solving" as descriptors revealed that the output covering just the educational literature of the 8-year period, 1968-1975, was several hundred citations.

[2] It is generally agreed that the ability to think logically or to reason implies an integration of the thinking processes with a system of logic. Implicit in the writings of many individuals who consider the question of what constitutes reasoning is the assumption that there is but a single system of logic. This is simply not the case. Different philosophers have formulated quite different logical systems, and no all-encompassing system of logic has yet been devised. The canons of one system of logic are not necessarily equivalent to, nor translatable into, the canons of another system. Thus, an adequate definition of reasoning must consider not only thought processes but the philosophy from which the logical system derives.

[3] The relationship between the logical requirements of the task and the logic of the system reflected in the person's thinking is discussed by Jean Piaget and Barbel Inhelder in *The Growth of Logical Thinking From Childhood to Adolescence* (New York: Basic Books, 1958).

[4] The work of Piaget describes several cognitive developmental levels through which children progress, each characterized by specifically defined reasoning capabilities. While there is some controversy concerning ages at which children progress from one level to the next, the existence of the levels and the fact that individuals pass through levels in sequence is generally accepted.

how the ability to reason develops, has potential for the design of educational environments and curricular materials that will help children develop more effective reasoning skills more efficiently. Piaget's work has been available to the United States educational community for many years, but it has not as yet had a significant effect on educational practice.[5]

Educators seeking information and ideas that they can apply to educational practice often turn to the research of psychologists. Teachers and psychologists both are interested in problem solving; their perspectives, however, are quite different. Classroom teachers are, of necessity, concerned with the broad range of everyday problems their students face.[6] Learning psychologists, who investigate problem solving as a facet of their broader research on thinking, generally focus their inquiries on problems of a more formal nature. However, only some of the problems investigated by learning psychologists are directly related to the formal problems that children confront in schools.

Another difference in teachers' and psychologists' perspectives on problem solving is a difference in goals. Learning psychologists investigate problem solving as a contribution to the goal of fully describing how people solve problems and identifying task variables, thinking styles, and personality traits that influence problem-solving behavior. The goal of practicing educators is to teach people to be creative problem solvers. As yet, neither the learning psychologists nor the educators have made sufficient progress toward their respective goals to aid in any substantial way the work of the other.[7]

The lack of success on the part of the psychologists can be attributed to the chaotic state of the field.[8] There are three quite distinct approaches to the study of problem solving within learning psychology. These may be described, generally, as the Gestalt/cognitive approach, the stimulus-response/learning theory approach, and the computer simulation approach. Separate lines of research on problem solving are being actively pursued under each approach at the present time, with currently the greatest activity under the learning theory and computer simulation approaches. Little or no attempt has been made to integrate the several approaches, and this separation presently is a major calamity of the learning psychology field.

The lack of progress on the part of educators can be attributed to the fact that, although the developing of students who reason logically and successfully solve problems is an oft-proclaimed outcome of schooling, concerted attention rarely is given to achieving this outcome in most classrooms today. This situation exists despite the availability of various instructional techniques, procedures, and materials designed to develop specific reasoning and problem-solving skills, and despite the findings in experimental studies that children's skills can indeed be improved through the use of these techniques, procedures, and materials.[9]

The impetus to develop such materials and procedures for children in the United States schools can be traced in virtually every instance to the inspiration of John Dewey, and in particular to his classic book, *How We Think*, which he addressed to educators in 1910 (revised edition, 1933). Dewey stressed the importance in the educative process of what he called "reflective thinking," analyzed and discussed its phases, and offered many ideas for promoting reflective thinking in school and classroom practice. Most of what has since been done to promote children's reflective thinking through classroom instruction represents an elaboration of Dewey's ideas (although they have sometimes been misinterpreted) and the acceptance (usually without question) of his system of logic. This work has acquired various labels over time, including such rubrics as: scientific thinking, critical thinking, logical reasoning, method of intelligence, problem solving, discovery learning, and inquiry.[10] Regardless of the various labels used, the procedures that have been devised and the materials that have been prepared seek to develop some portion of children's reasoning and problem-solving skills, usually in conjunction with the study of a particular school subject.

The elementary school subjects most frequently allied with the development of these skills are science, social studies, and mathematics. Thus, these subjects generally serve as the medium upon which children's reasoning and problem-solving skills can grow. But, to the extent that science, social studies, and mathematics are taught didactically and with an emphasis on acquiring information, the potential for growth in reasoning and problem-solving skills goes unrealized. To engender this growth, the obvious need is for teachers to reduce the amount of didactic and information-building instruction in favor of those procedures and materials that teach science, social studies, and mathematics with an emphasis on reasoning and problem solving. It is not a question of the availability of suitable, effective nurturing media, but of their more widespread utilization.

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[5] It is true that, within the past 15 years, psychologists and science and mathematics educators have carried out studies related to Piaget's theory and designed curriculum based on this theory. Teachers have been taught about Piaget's theory and read about his work. However, the theory has not been translated into the kind of understanding that teachers must have to apply it effectively to classroom practice. Consequently, the potential of Piaget's work has not been realized on the United States educational scene.

[6] Elementary school children confront many problems in the course of a schoolday ranging from very personal problems (Why is the teacher annoyed with me and what can I do about it?) to very practical problems (How can I get Sarah to trade her bologna sandwich for my egg salad sandwich?) to the formal problems most often associated with the formal educative process (How do I subtract 9 from 0 when confronted for the first time with subtracting 29 from 50?). Only the formal problems are considered in this overview. The more formal problems are also the type studied by learning psychologists.

[7] The fact that psychologists and educators have not been more successful in their attempts to develop a theory or theories of human problem solving cannot be attributed to a lack of effort on their part. The research reports and discussions on these matters constitute an extensive literature, as already indicated.

[8] Davis, in *Psychological Bulletin*, Vol. 66, No. 1, begins his 1966 review of the field with these words: "Research in human problem solving has a well-earned reputation for being the most chaotic of all identifiable categories of human learning."

[9] The findings of these studies are widely scattered in the educational research literature, and no comprehensive summary of them has been published. Citations and discussions of pertinent selected studies may be found in: Catherine Patrick, *What Is Creative Thinking?* New York: Philosophical Library, 1955; Gary A. Davis, *Psychology of Problem Solving*. New York: Basic Books, 1973; and "Teaching the Young To Think," *Theory Into Practice*, Vol. 12, No. 5, December 1973.

[10] No small amount of confusion has been engendered by the introduction and use of these labels, and the commonalities to be found under the various rubrics are sometimes not readily apparent. To be sure, there are identifiable differences among the techniques and approaches listed, and no simple equating of them all is being implied. Rather than undertaking a long-winded dissertation on the differences, we prefer to focus here on one significant common characteristic.

With respect to both research and practice, reasoning and problem solving is today an area of unrealized potential.

NIE products

The products described in this *Catalog* may be divided into two categories. These are:

- Comprehensive curriculum packages often supplemented with teacher-training and/or pupil-assessment materials designed to aid pupils attain specified reasoning or problem-solving skills; and
- Teacher-training materials which provide guidance to the classroom teacher who wishes to incorporate reasoning and problem-solving activities into the teaching of traditional subjects such as reading, mathematics, and science.

Curriculum packages

Three comprehensive curriculum packages designed for use with elementary schoolchildren are included in the *Catalog*. These are: The Perceptual Skills Curriculum developed by the Learning Research and Development Center; the SWRL/Ginn Instructional Concepts Program (ICP) developed by SWRL Educational Research and Development Center; and the Language and Thinking Program (LAT) developed by the Central Midwestern Regional Educational Laboratory (CEMREL, Inc.). The Perceptual Skills Curriculum comprises four instructional programs: Visual motor, auditory motor, general motor, letters and numerals. The package is designed to be used developmentally with children from preschool through second grade. Criterion-referenced tests are provided to aid the teacher in assessing the skill level of a child entering the program and to insure that each child attains required skills before entering a new phase of the program. The ICP program provides materials and procedures to assist a teacher in promoting a child's understanding of concepts such as color, size, shape, and amount. Criterion exercises are provided for each instructional unit to aid the teacher in identifying children who need additional instruction.

The LAT program is divided into two levels. Level I is designed for children ages 3 to 7; Level II is designed for children ages 8 through 12. Each program includes a series of packages that promote intellectual development and reasoning ability. Level I packages focus on the development of language arts, prereading, and cognitive skills. Visual and auditory discrimination, verbal response skills, categorization, association, sequencing, and critical-thinking skills receive primary emphasis. Level II packages focus on the development of skills required for comprehension and reasoning in both written and oral form. Each package is accompanied by teacher-training and criterion-testing materials.

Research for Better Schools, Inc., has developed a curriculum package for use with secondary school pupils. This package, Making Judgments, provides programmed instructional units which assist pupils in developing, understanding, and evaluating argumentative assertions and value judgments and in generating and testing causal inferences.

Two curriculum packages developed by the Learning Research and Development Center provide the pupil with practical experience in problem solving through computer programming. These packages, Series Computer Assisted Instructional Program (Series) and Logo Teaching Manual, include a software system and user's manuals which allow pupils from grade 1 to 12 to learn to state problems, gather data, and test hypotheses through interaction with the computer system.

Teacher-training materials

The *Catalog* describes four sets of teacher-training materials: Development of Higher Level Thinking Abilities (HLTA) and Facilitating Inquiry in the Classroom, developed by Northwest Regional Education Laboratory; Minicourse 9: Higher Cognitive Questioning, developed by the Far West Laboratory for Educational Research and Development; and Thinking and Reasoning Teacher Development, developed by Southwest Educational Development Laboratory. Each of these packages provides a series of instructional units which may be used by or for a campus course or inservice workshop. Each of the programs includes small-group discussions and simulations to prepare teachers to use teaching strategies that encourage students to develop higher level thinking abilities.

ACHIEVEMENT COMPETENCE TRAINING (ACT)

A multimedia course to teach 5th- through 7th-graders
a strategy for setting and achieving their own goals

Achievement Competence Training (ACT) is a multimedia, partially programed course designed to teach 5th-, 6th- and 7th-grade children a behavioral strategy for setting and achieving their own goals. The program builds competence in goal achievement, helps children set realistic levels of aspiration, and enhances belief in internal control. Belief in internal control is defined as the degree to which individuals view themselves as in control of their lives. This belief is an important variable which is positively related to academic achievement, social responsibility, healthy interpersonal relationships, and personal adjustment. ACT was developed in response to the increased alienation from society by individuals who do not believe that they can have any influence on their environments and do not believe that they can significantly influence the course of their own lives.

The heart of ACT is a six-step strategy for goal achievement. In the first step, Study Self, children learn techniques for gathering data about themselves. They recall past achievements and think about their strengths—things they do well. In the second step, Get Goal Ideas, they use individual and group brainstorming techniques to generate as many goal ideas as they can, based on their past achievements and strengths. In the third step, Set a Goal, they mold goal ideas into specific medium-risk goal statements and actually set a personally meaningful goal. Plan, the fourth step, teaches children to name the tasks in order. In the fifth step, Strive, children explore their striving style. They are encouraged to try out various techniques which people have used to persist in accomplishing a task. Finally, in the sixth step, Evaluate, children decide whether they achieved their goals, what specifically they did well and what they could improve, and how well they used the strategy.

The strategy itself is presented in four six-part units of work. Following the first unit, each unit calls upon the child to actually set a goal and strive for it, building on previously learned skills and using the self-study data. To help the child practice the achievement strategy, ACT uses audiotapes, student journals, filmstrips, music, sound effects, dramatizations, meditative trips, personal surveys, and games. In a typical lesson, students listen to a tape that presents concepts, describes alternative solutions to problems, and calls upon them to engage in a variety of activities. Each student has a journal notebook to use at the desk or with small groups of other students as directed by the tape. Student learning of the course content is evaluated through the use of pretests and posttests throughout the course and by a mastery test at the end of the program.

The ACT package is self-contained and self-instructional. The teacher's role is essentially that of facilitator and counselor. No special teacher training is necessary. The audiotapes lead the children and the teacher through the content and give directions for all activities. The teacher need spend only 1 hour or so in reading the introductory materials and about 5 to 10 minutes in previewing each lesson.

SUBJECT AREA(S)

Achievement competence.

ACT's content is made up of a six-step strategy for goal achievement: (1) Study Self, (2) Get Goal Ideas, (3) Set a Goal, (4) Plan, (5) Strive, and (6) Evaluate.

INTENDED USERS AND BENEFICIARIES

ACT has been designed for children in grades 5, 6, and 7 with a mean class reading level of 3.5 and above. Research shows that it is at the 5th-grade level that children begin developing skills in abstract thinking and conceptualization so that they can create hypotheses and draw logical conclusions. They also learn how to gain recognition through producing things. Although the ACT strategy and skills would be useful for older children, the art in the journals and the examples on the tapes might be rejected as being too childish by pupils above the 7th grade.

GOAL(S) OR PURPOSE(S)

ACT has three goals: (1) To teach the children to be more competent in achieving their own goals, (2) to increase children's awareness of their ability to achieve by helping them develop more realistic levels of aspiration, and (3) to enhance children's belief in internal control by giving them a greater sense of agency—a feeling that what they do makes a difference in their own lives. The program also contributes to the enhancement of self-directed activity and self-responsibility in learning and achievement.

PATTERNS OF USE

Children may use the ACT strategy either individually or in small groups. The strategy itself is presented in four units of work. Unit I builds the vocabulary and behaviors needed to use the package. It provides an introduction and an overview of the central concepts. Unit II focuses on the skills that compose the steps of the strategy. Children are given practice and experience in using striving techniques and in gathering information about themselves. Unit III reviews and enlarges the strategy. In this unit, the children begin to put the skills together, using the strategy as their own instrument. Finally, unit IV requires students to synthesize skills learned in previous units as they work together to achieve a group goal. In this activity, the entire class uses the ACT strategy to set, plan, and strive for a relatively complex goal. The entire program, including instructions for its use, is on audiotape. The lessons are individualized, in that they ask students to contribute personal data to the children's learning by presenting the models, answering questions, giving individual assistance, and sanctioning the instructional message.

ASSESSMENT PROVISIONS

The package contains posttests, an ACT mastery test, and student journals in which learners themselves record their progress. Criteria for assessing journal page responses and for scoring the posttests and a scoring key for the mastery test are provided as part of the ACT package. An optional testing package is also available. The testing package provides all the instruments necessary to conduct a pretest and posttest assessment to measure the effect ACT has had on learners in building self-esteem, enhancing belief in internal control, and applying the ACT concepts.

TIME REQUIREMENTS

Each of the four six-part units is divided into three lessons which last 15 to 20 minutes. The teacher may use each lesson separately at different times during the day or separately on different days, or may combine the three lessons in one time period. The total course takes about 32 hours of class time.

IMPLEMENTATION PROCEDURES

ACT is adaptable to all kinds of learning settings from an open classroom to a highly rigid, subject-oriented structure. No special resources or organizational changes are necessary. The only additional equipment needed are items usually already available in schools (e.g., audiotape cassette player, filmstrip projector, and movable desks). The teacher need only schedule time within the day to use ACT.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

ACT was independently evaluated for unintended side effects with 5th-grade classes in three schools of the Washoe County School District in Reno, Nevada. In his report on the evaluation, G. Paul Killian, director of research and development for the district, indicated that the effects of the program were clearly positive both for individual children and for the classes as a whole. No instances of physical, psychological, or sociological harm as a result of the program's activities were reported.

Assurances of Social Fairness

During the development of the ACT programs, the development team invited members of the Black Caucus, a recognized employee group within Research for Better Schools, Inc., and an informal group of women, who identified themselves as interested feminists, to participate in the formulation of a policy statement bearing on racial and sexual bias. Statements were developed by both groups. Members of the two groups were then invited to use these policy statements to review the ACT materials and suggest changes. They did so, and the changes were made as suggested. In addition, the editors of the Webster Division of McGraw-Hill Book Co. have reviewed the ACT materials using their policy statement as a guide and have found the ACT materials to be in compliance.

Assurances of Replicability and Transportability

ACT materials are now being or have been successfully used in approximately 53 schools in 18 States in the United States, as well as in Guam and Australia, without developer assistance of any kind. The teacher's manual, provided with the package, is sufficient for a teacher to successfully administer the course.

Claims of Effectiveness

A field test and an evaluation of the ACT materials were conducted with over 3,000 children in 32 schools in the Philadelphia area. The evaluation compared the effectiveness of the ACT materials, both with a similar curriculum treatment and an uninstructed control group. The groups tested were equal in IQ and test anxiety and were matched for socioeconomic status.

A battery of tests, some standardized and some especially developed, was administered to the children. These tests included measures of self-esteem, internal control, content mastery, application of content, risk taking, achievement attitude, planning ability, task-ordering ability, fluency in listing strengths and goal ideas, and self-selected versus other-selected activities outside of school.

The following clearly defined effects emerged from the evaluation:

1. The ACT materials do teach the strategy. A stringent scoring of the ACT master test (which is a criterion-referenced measure of course content) revealed an average student score of 24 out of a possible 36 points.

2. Those who had ACT set more realistic standards for personal achievement.

3. ACT does enhance internal control.

4. Those who had ACT successfully transferred the strategy concepts to other simulated situations and showed movement toward an increase in positive self-evaluation.

A detailed report of the findings is contained in "Achievement Competence Training, A Report, Part VII: Field Test and Evaluation." The evaluation results were independently reviewed by Richard C. Teevan, Chairman of the Psychology Department of the State University of New York, Albany. He substantiated the findings.

Claims of Social Fairness

The ACT program not only avoids social bias, but also deals with sex and race without being negative. Through visual and aural modeling, girls as well as boys set and attain their own goals in both "typical" and "less typical" tasks. Boys and girls are taught skills which enable them to be self-directed, free, and independent without regard for culture-bound roles.

Claims of Careful Product Development

The instructional strategy which is the heart of ACT is the result of an extensive search of over 600 documents which focus upon effective goal setting and attainment. The content of the materials has been reviewed by Pauline Sears, of Stanford University; Evan Keislar, of the University of California, Los Angeles; and Richard Teevan, of the State University of New York at Albany. They described the content as being exciting, valuable, important, and effective.

The format of the materials was developed from the literature analysis, from selected surveys of what was actually accepted and used in the classrooms, and from an examination of existing instructional materials.

The materials themselves underwent four major tryouts, each with an increased level of sophistication and complexity. The tryouts began with 1 class of 12 children and culminated in a major field trial and evaluation involving 3,000 children in 32 schools. As a result of each tryout, the materials were further refined. Concepts were dropped and added, merged, and distinguished, until the children gave evidence that they understood the concepts and could successfully meet the requests for participation made by the materials.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set: Audiotape cassettes; filmstrips; teacher's manual; game materials; achievement worksheets and posters; posttest, mastery test, and remedial Webstermasters	1 set per class of 25 students	129.00	Reusable except worksheets and posters (consumable yearly) Webstermasters (consumable 2-3 years)	
Student journal	1 per pupil	4.26	Consumable yearly	
Worksheets and posters	1 set per 25 students	5.31	Consumable yearly	
Posttest, mastery test, and remedial Webstermasters	1 set per 25 students	9.65	Consumable 2-3 years	
Teacher's manual (extra copy optional)	1 per classroom	13.71	Reusable	
Evaluation test package (optional)	1 set per class of 25 students	3.50	Consumable yearly	Research for Better Schools, Inc., 1700 Market St., Philadelphia, Pa. 19103
ACT Teacher Training* Workshop: Self-instructional package designed to teach the use of the ACT strategy in the classroom.	5 audiocassette tapes 1 coordinator's manual 1 set of worksheets	Not determined		
ACT Achievement Competence Training: A Report				
Part V—Utilization of Formative Evaluation Data (1975)		6.00		
Part VII—Field Test and Evaluation (1974)		4.00		
Part VIII—Anecdotal Reports, Exhibits and Structured Interviews (1974)		6.00		
Part X—Locus of Control, A Study of the Correlates (1974)		6.25		

*This workshop is not a prerequisite for using the ACT materials.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Russell A. Hill, Program Director

AVAILABILITY

The ACT materials are in the final stages of production for commercial distribution. The materials will be published spring 1975 with a copyright date of 1975 by McGraw-Hill Book Co. For information contact:

Webster Division
McGraw-Hill Book Co.
Avenue of the Americas
New York, N.Y. 10020

INFORMATION CURRENT AS OF MARCH 1975 ■

INVESTIGATING YOUR ENVIRONMENT

An instructional unit allowing secondary students to select and investigate an environmental question

Investigating Your Environment is a 6- to 9-week instructional unit (module) for students between junior high school age and adulthood. Using the definition of environment as "anything external to you that affects you," students are given opportunities to select and investigate a question that they consider important for themselves and others. The emphasis is on decisionmaking and learning how to learn. Students, working individually or in small groups, select the problem to be investigated, formulate researchable questions, plan and conduct investigations, and communicate their findings in a way they consider appropriate. No investigations are predesigned. No questions are predetermined. Rather, students work in an atmosphere of freedom and trust to devise and conduct investigations they consider meaningful.

The program's rationale is based on some important objectives and findings. First, there is ample evidence to suggest that no significant environmental question can be answered within the context of a single discipline. During field testing of *Investigating Your Environment*, it was found that "real" questions—those that students want to answer—usually require inputs from a variety of disciplines and subject matter areas. The curriculum also assumes that learning how to deal with a question is more important than absorbing numerous facts about a given topic. Educators and curriculum developers today cannot be certain of which facts are going to be most relevant to tomorrow's decisionmaking. Understanding and deciding about environmental questions requires a knowledge of how to obtain and interpret facts. To accomplish this end, it is believed that students should have experience with these processes—gaining information and insights as they progress. It has also been found that such experiences develop feelings of personal competence and skill in self-directed activity, learning, and decisionmaking.

SUBJECT AREA(S)

Junior high, senior high, college, and adult science, life science, social studies, and environmental studies are the subject areas.

Investigating Your Environment includes a comprehensive teacher's handbook that suggests ways of introducing the program, makes appropriate administrative arrangements, orders equipment and supplies, and facilitates students' investigations.

The student's handbook includes guides for designing an investigation and for analyzing reports. The bulk of the book is devoted to techniques which students may select and use when appropriate to their problem. Techniques are included for measuring air and water quality, studying populations, sampling opinions and attitudes, and investigating noise and land use. Suggestions are given for utilizing the resources of the library, government and private agencies, and community groups.

The program also includes eight paperback books of resource materials. The books include articles from a variety of sources such as "BioScience," "Science," "Saturday Review," "The New York Times," and "Environment," which, when necessary, have been rewritten to the reading level of students and lay citizens. The eight books are *The Environment: Some Viewpoints*, *The Price of Progress*, *Food for Humanity*, *Human Population*, *Solid Wastes*, *Pesticides*, *Land Use*, and *Water Quality*. The paper collections serve as data sources, as exemplars of research design, and as a forum for divergent opinions on controversial environmental topics.

INTENDED USERS AND BENEFICIARIES

The course is appropriate for secondary school, college, and adult classes. The experience of selecting a problem of importance to the individual and actually investigating the questions associated with the topic chosen is valuable for students of all ages. The initial field testing of the module was conducted with high school biology classes. Since that time, inservice workshops have been conducted, training teachers to use the materials at the junior high school and college level. The materials are also being used in teacher training courses.

GOAL(S) OR PURPOSE(S)

The major goals identify one overall objective: To allow each student to explore new ways and develop abilities for problem solving and answering real questions by encouraging and providing the opportunity for individual choice, decisionmaking, responsibility, and commitment; interaction and communication with others; exploration of the educational environment beyond the school; and independent learning consistent with the student's cognitive ability and interests.

REASONING AND PROBLEM SOLVING

RD 040 002

PATTERNS OF USE

Students begin the unit by considering their own values and the things the environment must supply in order to obtain the quality of life they desire. Lists of values and environmental concerns vary within any class. Based on what they value, students select relationships between environment and lifestyle that they consider important enough to investigate. Through a series of discussions, relationships are turned into researchable questions.

Once the questions are identified, students design and carry out investigations. This data-collection phase usually requires 3 to 4 weeks of research time, both within and outside the classroom. The data-collection phase may involve such things as water or air testing, phone calls and appointments with representatives of appropriate government agencies and private groups, traffic or noise surveys, and interviews and questionnaires designed to sample public opinion and attitudes. Students are encouraged to obtain "new" data that they collect themselves and to combine their own findings with data from other sources, drawing upon libraries and "people resources" in an attempt to answer their questions. Once data are collected, students analyze what they have found, often discussing their results with teammates, other members of the class, and the teacher. Students next prepare to present their findings in some appropriate way—perhaps through articles and letters to newspapers, through class reports, or through discussions and presentations to community groups (tables, graphs, and other visual aids are often used in communicating findings).

ASSESSMENT PROVISIONS

In this program, the most important function of assessment is to provide feedback to the learner. In the context of investigating real questions, such feedback helps the learner adjust, revise, or refine investigation plans or procedures and evaluate progress. The nature of this curriculum makes it virtually impossible for teachers to make comparisons of students' performances. Most of the questions that students choose to investigate have not been previously investigated, at least not in the context which the student defines. Therefore, there are no standards for comparison. Furthermore, it is impossible to compare one investigation with another. An investigation of water quality is quite different from one on human nonverbal communication.

The module's goals emphasize decisionmaking and learning how to learn. Self-assessment is an important part of the processes involved. Field-test experience has shown that, given the opportunity, the individual student can make the most objective appraisal of the learning experience. As a means to this end, students can be provided with a checklist, based on the module's goals and objectives, that they can use to judge themselves. Such a checklist can include questions such as, "Did I plan effectively?", "How well did I use my time?", "Did I complete the investigation as I had planned, or if not, why not?", "Was the investigation reported to the audience that I had chosen?".

TIME REQUIREMENTS

Investigating Your Environment requires a minimum of 6 to 9 weeks, assuming class sessions of 45 minutes to 1 hour. The course has also been used successfully for a full semester.

IMPLEMENTATION PROCEDURES

No special training is required for a secondary school or college instructor educated in science or social science to implement the program. One teacher or a team of teachers can manage a full class load using the program. Although no additional academic preparation is necessary, the teacher or instructor must be comfortable with an open, value-free atmosphere in which lecture is abandoned in favor of problem-solving interaction with individuals or small groups of students.

Personnel Required for Product Adoption and Implementation

One instructor can handle many students. Cooperation of school administrators, secretaries, librarians, counselors, and faculty helps facilitate student investigations.

ASSURANCES AND CLAIMS

Assurances

The materials display no form of sexual, social, or ethnic bias. Field testing in a variety of classrooms, including racially and economically mixed, gave no evidence of any real or perceived prejudice. In field testing and in subsequent use, no case of harm, either physical or psychological, has been reported. The program is transportable and replicable. It has been used successfully in numerous classes without developer involvement.

Claims

The program is interesting and appealing to large numbers of students. Depending on the class, from 67 to 95 percent of the students indicate that they would prefer to continue the program rather than return to "regular" class activities. Students have demonstrated the ability to collect existing data related to their problem from a variety of sources, including publications, agencies, and organizations. New data are also collected in most investigations, using techniques such as interviews; questionnaires; and measurements of air quality, water quality, noise levels, and soil composition. In field-test classrooms, 32 percent of the students collected, analyzed, and summarized opinions or information instead of quantitative data. Of those collecting quantitative data, 62 percent manipulated the data into some new, more meaningful form. In the opinion of teachers and developers, 88 percent of the investigations were judged as successful.

Investigating Your Environment was designed in accordance with sound educational and scientific knowledge and practice. The materials were revised four times prior to commercial release. The revisions were based on content reviews, student and teacher feedback, and changes in knowledge and technology. For a list of the many professionals who contributed to the development of the materials, see the teacher's handbook.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student's handbook	1 per student	3.99	Reusable	
Teacher's handbook	1 per instructor	3.99	Reusable	
Test kits and apparatus	1 per classroom	169.30	Contain some consumables, some reusables	Hach Chemical Co., Ames, Iowa 50010; Millipore Corp., Bedford, Mass. 01730; Mountain Industries, Boulder, Colo.
Investigating Your Environment (resource papers)	1 per classroom	To be announced	Reusable	
Miscellaneous supplies and equipment	As needed	Free; also usually available in classroom or home	Reusable	
Miscellaneous resource books	As needed	Free or moderate	Reusable	

DEVELOPER/AUTHOR:

Biological Sciences Curriculum Study
University of Colorado
P.O. Box 930
Boulder, Colo. 80302

William V. Mayer, Project Director

AVAILABILITY

Copyright 1975 by the Regents of the University of Colorado. *Investigating Your Environment* is available from
Addison-Wesley Publishing Company
2725 Sand Hill Rd.
Menlo Park, Calif. 94025

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 003

LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1

A program to develop skills that promote intellectual development and reasoning ability in preschoolers and first graders

Language and Thinking is an instructional program that consists of a series of 10 packages to develop skills that promote intellectual development and reasoning ability. The series provides instructional activities for preschool through 1st grade.

The packages provide a sequential instructional system with specific behavioral objectives for each of the packages. The specific objectives for each of the packages are divided according to the package title or attribute. Briefly, the LAT, Level 1 packages are:

1. Let's Start—An introductory package that explains the mode of presentation, suggests grouping procedures, and recommends bases for the selection of activities for the teacher.
2. Colors—Presents discrimination and identification, comparative and combinational activities; introduces simple question asking and functional operations that are associated with the colors of objects found in the child's environment.
3. Shapes—Extends the learnings and activities of Colors to include work with shapes.
4. Sizes—Builds on Colors and Shapes to provide experiences with relative sizes of objects.
5. Directions—Provides activities for introducing the locations of objects, animals, people, and services related to home, school, and community. Following and giving directions are also included in this package.
6. Blends—Combines Colors, Shapes, Sizes, and Directions activities for review or as an entry point for some children who may have acquired the knowledge and skills presented in the preceding packages.
7. Action—Pantomime and role-playing activities provide a base for the discussion and use of verb forms with appropriate pronouns to describe actions familiar to children.
8. Functions—Presents identification and discrimination tasks related to the use, materials, and parts of familiar objects in the child's environment. Many of the experiences provided involve visual, auditory, olfactory, and tactile sensory discriminations.
9. Classification—This package presents instruction on the various ways that elements in the environment can be ordered, classified, and reclassified.
10. Relevant Learning Experiences—Provides a series of activities selected by the teacher either to accompany instruction presented within the other packages or as culminating and enrichment experiences. The Alphabet House, a unique and motivating approach for introducing letter names; Creative Writing, which provides activities for developing creative writing interest and skills; The World Around Us, an accompanying field trip guide; and Game Activities are included here.

Throughout the packages, the primary emphasis is placed on the acquisition of skills and concepts. This cannot be accomplished without giving attention to the language used in association with this instruction. The teacher is encouraged to be more concerned about the content of the child's responses rather than the structural form of those responses.

The program is designed to encourage the teacher's involvement and interpretation. Guidelines for teachers are specific, but there are alternatives available which allow for teacher selection of activities and materials.

The use of a variety of specific objects to illustrate concepts has high priority in the *Language and Thinking Program* packages. The packages include a wide variety of manipulatives, picture cards, transparencies, activity books, and audiotapes. It was felt that a variety of presentation modes would heighten the level of interest and attention for both children and teachers during the lessons.

Sample Lesson

(Addressed to Teachers)

Classifications Package (LAT, Level 1)

Lesson 7

Instructional Objectives

9. The child can identify an object from a definition that includes its function, parts, the materials it can be made of, and the class to which it belongs. 10. The child can ask questions about categories of objects to find out the name of an object that is not visible. 11. The child can use information about the name, color, shape, size, location (where applicable), function, parts, materials, and class to describe objects with prompts from the teacher; for example, "Tell me all of the things about this (object) that you can think of."

Procedures

1. Select objects (or pictures of objects) that display a wide variety of attributes and features and encourage the children to generate complete descriptions. Show an object and ask the children to give: Its name; its class; a definition of the class; its color, shape, and size (compared to other objects in class or relative to another object that has been described; for example, "It is smaller than a ...."); its use (definition of class is often the same); its location (if common to the class or appropriate); material; and parts (if appropriate).

It is unlikely that one child will be able to describe all of these features, but by asking questions and allowing several children to contribute to a description, you will be able to emphasize the presentation of complete descriptions.

2. Several objects or groups of objects should be used to conduct this activity, but avoid making the task laborious. The children should be praised for all of the knowledge they have acquired; for example, "My, you are really smart. You know so many things that you can tell about these things. Can we think of something else that we know about this?"

3. You may wish to make a chart or list of the features described. Examples are as follow:

NAME: cup
CLASS: dishes
DEFINITION: things to eat or drink from
COLOR: white
SHAPE: circular (round)
USE: for drinking things
LOCATION: usually a kitchen or dining room
MATERIAL: china
PARTS: bowl and handle

You may refer to the chart of features as the children tell all they can about an object and remind them that "We haven't talked about how we use this," or "We haven't told what shape it is," and so on.

4. You may disperse these description tasks among other activities presented from this package to increase the likelihood that children will enjoy them.

SUBJECT AREA(S)

Language arts, prereading, cognitive skills, social studies, selected mathematics content, and science are areas from which content has been drawn. Visual and auditory discrimination, verbal response skills, categorization, association, sequencing, and critical thinking skills receive major emphasis.

INTENDED USERS AND BENEFICIARIES

The program has been formally tested with children ages 3 to 7. Suggested guidelines are provided for the teacher to select instructional content for each age group. The program is broad enough to permit differential sequencing, pacing, and classroom application with a wide variety of youngsters—children who speak a language other than English, urban and rural children, children who have difficulty learning, and privileged as well as underprivileged children.

The program was field tested with about 5,000 children in various locations and in a variety of socioeconomic settings. An additional 22,800 children are using the materials this year as a result of commercial distribution by the Follett Publishing Company. Since the packages can be used over and over and even shifted to other classrooms, this figure probably is low.

GOAL(S) OR PURPOSE(S)

The general goals of the program are to develop visual and auditory discrimination, the child's use of basic language, verbal fluency, increase vocabulary size, ordering, association, classification skills, sequencing skills; and to provide practice in critical thinking, drawing relationships, making inferences, making predictions, analyzing problem situations, synthesizing ideas, recognizing incongruities and analogies, making hypotheses, and evaluating situation events and actions. These goals are explicated by 127 instructional objectives across the 10 packages.

PATTERNS OF USE

Each of the 10 packages is a self-contained unit of instruction with activities that are sequential and cumulative. The packages are also planned to provide a sequential and cumulative instructional approach as a complete program. It is possible to select and use any one of the individual packages as a stand-alone segment of instruction, and individual packages may be purchased from the publisher for this purpose. This approach is not recommended by the developer, however, if maximum benefits are to be accrued from the program. Mastery learning criterion measures are available, separately, to assess student's entry skills and for package placement. The program has served as the core curriculum and as a supplement to other early learning programs.

The most commonly adopted use pattern is the installation of the first five packages in kindergarten classes and the second five packages in the 1st grade.

LAT has been used successfully in self-contained, open-individualized, and team teaching arrangements. Small-group instruction is recommended. The patterns may be flexible and adapted to individual school needs.

ASSESSMENT PROVISIONS

Several approaches are incorporated for frequent assessment of pupil progress. Guidelines are included in the teacher's guidebooks, which accompany each package, for use of teacher judgment of such areas as language acquisition skills. Student activity sheets are used for assessment of some skills related to small segments of instruction. Practice tests, which are built into the program, assess a small series of instructional outcomes on a frequency of every six or seven lessons of instruction. Available separately are language and thinking mastery learning criterion tests that may be used as pretest and posttest measures for placement and assessment of student outcomes.

TIME REQUIREMENTS

Thirty minutes of instruction daily is recommended if the objectives are to be met in a single year. If the packages are installed for use over a 2-year period with the same children in kindergarten and 1st grade, shorter periods may be used.

IMPLEMENTATION PROCEDURES

Each teacher's guide contains introductory information, the instructional objectives for the package, a list of the materials provided, and suggested lesson-by-lesson presentations. The lessons are not planned to be presented from start to finish during a single instructional session. Instead, the lessons are planned to develop a series of activities for a topic; for example, "Matching and Sorting "Colors" is the title of lesson 1 in the *Colors* teacher's guide. Objectives for each lesson are often repeated for a number of lessons. This recycling of tasks and activities is intended to provide overlapping—repetition without repeating the same task.

The program can be implemented by one teacher; however, a teacher with a teaching assistant or a team of teachers may use the series of packages. The packages are available separately for training and implementation guidelines. Evidence from classroom trials of the program indicates that student progress in achievement is partially a function of teacher consistency, regularity of presentation, and implementation in accordance with the suggested procedural guidelines.

Personnel Required for Product Adoption and Implementation

The program can be implemented by one individual, a classroom teacher, or a trained teaching assistant or a teacher's aide. Workshops are offered by the publisher, and consultation is available from the publisher or CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

There is no evidence of harm associated with the use of this product. No adverse effects of any kind were reported by teachers in any of the locations where prepublication versions of the program were used. In three large cities where experimental versions of the materials and procedures were used, the majority of teachers who used the program said that they liked all or part of the materials, believed that students substantially benefitted from the program, and would recommend the packages to other teachers.

The presence of sexism, racial bias, or cultural stereotyping was not mentioned by teachers using the materials. Before publication, the guides and illustrations were examined and edited by program developers and publishing personnel to assure sexual and racial representativeness.

The program can be implemented without assistance from the developer or the publisher using the instructions provided in the teacher's guide and those supplied in a separate teacher orientation package. In an earlier pilot test, informal feedback from a number of teachers who used the program without assistance indicated that they could and wanted to use the materials with their classes.

Claims

The prototype materials for the level 1 program were developed by a team of practicing kindergarten and 1st-grade teachers. The materials and instructional procedures used to develop the skills and concepts included in the program reflect their concerns over compatability of objectives with classroom practice.

These materials were refined and developed still further over a period of 4 years of classroom trials. Throughout this period, the content, scope, and implementation methods of the developing program were reviewed annually by a national advisory committee of subject matter specialists and instructional consultants. Similarly, the assessment activities associated with the program were periodically examined by a separate national advisory committee for evaluation.

Several studies were done to examine child outcomes associated with use of the program. In a prepublication version of the program, children who received either the full set of LAT materials and objectives or just the program objectives without accompanying materials, placed higher in reading readiness more often than children who had not used the program. Apparently the materials and objectives provide good preparation for later school work where reading will be required.

Another study conducted under the auspices of a State department of education compared classes using the LAT materials and a prereading program with classes using a traditional kindergarten program. Here, classes using the LAT and allied materials had fewer children for whom failure in reading was predicted.

A prepublication study was done comparing classes whose teachers were given all of the LAT package objectives and materials with classes whose teachers were given only a list of instructional objectives without accompanying materials. In terms of student mastery, there were no important differences between these two groups.

The program offers teachers a set of instructional guidelines. These guidelines provide specific suggestions for using the materials. On a set of assessment measures which accompany the program, there was a definite relationship between children's mastery of program objectives and the degree to which teachers carried out the program as suggested.

DEVELOPER/AUTHOR:

**CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139**

Harriet Doss Willis, Program Director and Major Author

AVAILABILITY

The *Language and Thinking Program, Level I* was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:

**Follett Publishing Company
1010 West Washington Blvd.
Chicago, Ill. 60607**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 004

LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1, TEACHER ORIENTATION PACKAGE

A multimedia instructional program for teaching essential comprehension and reasoning skills to students in grades 2-6

This package is used to provide orientation for teachers of the content, skills, and approaches of the Language and Thinking, Level 1 (LAT-1) instructional program. The package consists of a coordinator's manual, three filmstrips, and three accompanying cassette tapes. The coordinator's manual provides an overview of the content of all 10 of the instructional packages and suggested guidelines for implementing a series of 3 orientation workshops for teachers. These guidelines include suggestions for participatory activities for teachers who will be using the instructional program. Demonstrations of instruction with students in classroom settings are provided on the filmstrips and narrated on the cassette tapes.

The emphasis of the package is upon the sequential design and structure of the program and the opportunity for teacher flexibility within this structure. Emphasis is also placed upon the importance of teachers implementing the instructional program in a positive emotional climate. The audiovisual demonstrations provide clear examples that the LAT-1 program accepts the language of the child, provides alternative models, reinforces unique responses, and provides opportunities for students to expand their language usage.

SUBJECT AREA(S)

Language arts, cognitive skills development, prereading, social studies, mathematics, and science are subject areas included. Emphasis is placed on teacher training associated with content in these areas.

INTENDED USERS AND BENEFICIARIES

Classroom teachers and teaching assistants who work with children ages 3-7 using the LAT-1 program are the intended users.

Other possible users are curriculum specialists, master teachers, principals, or teachers serving as instructional coordinators.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To provide teachers with a general introduction to the *Language and Thinking, Level 1 Program*; (2) to provide teacher leaders (coordinators, curriculum specialists, principals) with appropriate guidelines for conducting teacher-orientation workshops concerning the use of the LAT-1 program; and (3) to provide parents of children using LAT-1 program with an introduction to the scope and content of the program.

PATTERNS OF USE

For school districts that provide inservice activities before or during the first week of the school year, the workshops using the *Language and Thinking Program, Level 1 Teacher Orientation Package* can be conducted at that time. Where inservice training is not scheduled at that time, the series of workshops may be conducted at any time throughout the school year.

The developers recommend that a series of three workshops be presented, with the first one occurring prior to instruction of the materials; the second, when teachers are completing the sizes package of LAT-1; and the third, when teachers are completing the blends package. A teacher, on an individual basis, may also use the package for self-orientation.

ASSESSMENT PROVISIONS

Sample workshop and package questionnaire are included in the appendix of the LAT-1 teacher orientation coordinator's manual for the purpose of collecting feedback from workshop participants.

Personnel Required for Product Adoption and Implementation

A classroom teacher, curriculum specialist, or principal designated as a coordinator can implement the guidelines of the orientation package.

A classroom teacher may use the package independently for self-orientation.

ASSURANCES AND CLAIMS

Assurances

The teacher orientation package is for teachers' private use or for workshop meetings conducted for teachers or parents. No reports of harm associated with this product have been received.

Presence of sexism, racial bias, or cultural stereotyping was not mentioned by users. In the coordinator's manual, neither teachers nor children are referred to with the generic "he" or "she." The accompanying filmstrips portray teachers as being young and old, white and black, male and females. Similarly, children of different races and backgrounds are shown together in classes using the LAT materials.

There have been no reports either to the developer or to the publisher that the package cannot be used by curriculum specialists or by individual teachers without developer assistance.

Claims

Information about effectiveness of the training packages has been collected informally in a number of locations across the country. An overwhelming number of teachers who participated in workshops using the package thought that their use of the LAT materials would be improved.

There is no evidence to claim that use of this product affects either student outcomes or program implementation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher orientation package 1 coordinator's manual 3 filmstrips 3 cassette tapes	1 per school	39.99 School price	Nonconsumable	

Note: Distributed by Follett Publishing Co., 1010 West Washington Blvd., Chicago, Ill. 60607

DEVELOPER/AUTHOR:

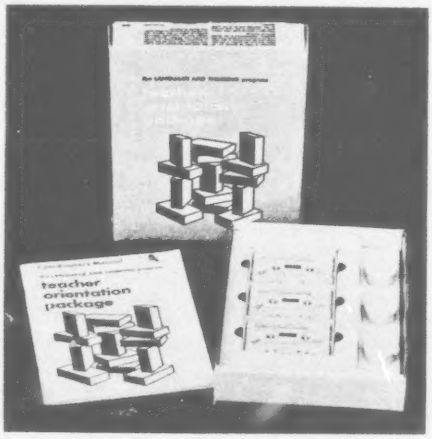
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harriet Doss Willis, Program Director and Major Author

AVAILABILITY

The *Language and Thinking Program, Level 1 Teacher Orientation Package* was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from the publisher:

Follett Publishing Co.
1010 West Washington Blvd.
Chicago, Ill. 60607



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 005

LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1, MASTERY LEARNING CRITERION TESTS

A series of tests to evaluate student achievement on content of the LAT-1 instructional program

The *Language and Thinking, Level 1, Mastery Learning Criterion Tests* is a series of criterion-referenced tests to assess student achievement of the content of the LAT-1 instructional program. The tests are: (1) Colors-shapes-sizes, which combines items for content of these three related instructional packages; (2) directions; (3) blends; (4) action; (5) functions; (6) classification; and (7) a practice test to provide initial practice with essential test-taking skills.

The test series is designed to be group administered by a teacher as soon as possible after instruction in a package is completed. An accompanying administration manual provides the necessary information for giving, scoring, and interpreting test scores. A scoresheet on the back of each test identifies the objectives tested by each of the items and indicates whether a child has achieved mastery on that objective. While performance on no fewer than three items is used to infer mastery, teachers are urged to rely on their judgment in cases where a child displays mastery of an objective in classroom exercises, but not in test performance.

SUBJECT AREA(S)

Tests and Measurements: Criterion-Referenced Testing.

Language arts, prereading, cognitive skills, social studies, mathematics, and science are areas from which content has been drawn. Visual and auditory discrimination, verbal response skills, categorization, association, sequencing, and critical thinking skills receive major emphasis.

INTENDED USERS AND BENEFICIARIES

Kindergarten and 1st-grade children, ages 5 to 7. Although the LAT, level 1, instructional program may be used with younger children, ages 3 to 4, the developers do not recommend use of the paper-and-pencil group tests with children this young.

The tests may be administered to children who speak a language other than English, urban and rural children, children who have difficulty learning, and privileged and unprivileged children.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To assess the objectives of the LAT-1 instructional program that are testable with a paper-and-pencil testing format, and (2) to assess other early learning programs on the basis of the similarity of instructional objectives to the objectives of the LAT, level 1, program.

PATTERNS OF USE

The major use of the tests is to provide teachers with an objective means for inferring student mastery of instructional objectives. The practice test is administered prior to use of other tests to determine student test-readiness skills. Information derived from the tests can also be used in association with the LAT-1 recordkeeping chart printed in each of the teacher's guides.

ASSESSMENT PROVISIONS

Students take the practice test before beginning the instructional program to acquaint them with test-taking procedures. The other tests are administered after completing each of the instructional packages.

TIME REQUIREMENTS

Each test takes approximately 1 hour to administer.

IMPLEMENTATION PROCEDURES

Implementation guidelines are clearly stated in each of the *LAT-1 Mastery Learning Test Manuals for Administration*. The developers recommend that these be reviewed and followed carefully.

Summary Cost Information

Although cost depends upon the LAT program plan selected and the number of students per classroom, the chart shows the cost of the most frequently used plans for test purchases.

The figures shown are all based on tests being used with 60 students—2 kindergarten or prekindergarten classes; two 1st-grade classes, or a combination of these.

Mastery tests per pupil cost: These costs are for the current final experimental version of the mastery tests. It is expected that the final published version of the tests will be less expensive. Further information concerning these changes is available from the publisher. Set 1 is a set of tests to accompany colors, shapes, sizes, directions, and blends packages and include cost of the practice test. Set 2 is a set of tests to accompany action, functions, and classification packages and includes cost of the practice test.

Personnel Required for Product Adoption and Implementation

The tests can be administered by one individual, a classroom teacher, or a trained teaching assistant or aide. Any combination of the above working together can also administer them.

ASSURANCES AND CLAIMS

Assurances

No reports have been received of harm associated with the use of the criterion tests. When interviewed, a number of teachers reported that the testing was beneficial to the children because they learned to listen and to follow directions. In addition, the testing experience acquired by the student made the administration of other school tests easier for the teacher.

Presence of sexism, racial bias, or cultural stereotyping was not mentioned by teachers using the tests. In the final version of the tests submitted to the publisher, all generic masculine referents in the administrator's manuals were changed to more neutral phrase such as "the child."

The criterion tests are designed to be used by the teacher without need of training or use of external scoring services. The administrator's manual includes all directions, scoring procedures, and interpretive information needed to use the tests.

Claims

Each of the six mastery learning criterion tests is based on the instructional objectives of the *Language and Thinking Level 1 Program*, that is, all items included in the tests are designed to test a child's understanding of one or more skills stressed during instruction. Teachers can use the tests to assist them in deciding whether a child needs additional instruction and, if so, specifically what that instruction should emphasize. Together, the use of the items keyed to learning outcomes and the pinpointing of skills still unlearned are important claims for the usefulness of this product.

In addition to the six tests assessing program content, there is a seventh called the Practice Test. This test has been included to familiarize children with the item format and directions used in the test series itself.

All of the tests have been revised at least once. Faulty items were removed; and in response to teachers' requests and publishing considerations, all of the tests were shortened. Reliability has been established for each of the subtests in the test series. Item correlations between the subtest of some of the criterion tests indicate good relationships between the various subtests within each test and between the subtests and the total score. Moderate correlations exist between the criterion tests and two other widely used preschool measures—the Metropolitan Readiness Tests and the Boehm Test of Basic Concepts.

Perhaps the best indication of the validity of the criterion tests is their sensitivity to variations in teacher use of the suggested procedures and materials in the Language and Thinking Level 1 Program. Mastery scores attained by children varied directly with how fully a teacher implemented the program. In a pilot study, children taught by teachers who implemented the program most fully scored highest on all five of the criterion tests used.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Set of 1 each of mastery test student books:	1 set per 6 students	4.89	Tests consumable yearly	
Practice test		.54		
Colors-shapes-sizes test		.63		
Directions test		.87		
Blends test		.63		
Action test		.54		
Functions test		.87		
Classification test		.87		
Set of 1 each of mastery test administration manuals	1 set per 6 students	14.22	Tests consumable yearly	
Practice test		1.32		
Colors-shapes-sizes test		2.31		
Directions test		2.31		
Blends test		1.65		
Action test		1.65		
Functions test		2.64		
Classification test		2.64		

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harriet Doss Willis, Program Director and Major Author

AVAILABILITY

The Mastery Learning Criterion Tests for LAT-1 were copyrighted in 1973, and copyright is claimed until 1978. It is currently available from the publisher:
Follett Publishing Co.
1010 West Washington Blvd.
Chicago, Ill. 60607

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 006

LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 2

A program to develop critical listening skills for children in grades 2-6

Language and Thinking (LAT), Level 2, is an instructional program for teaching essential comprehension and reasoning skills, including listening, reasoning, reading, and writing skills, to students in grades 2 through 6. The series of activity packages constitutes the program and provides a multimedia approach to learning component skills that are required for comprehension and reasoning in both written and oral forms.

The *Language and Thinking (LAT), Level 2*, packages provide instruction for a range of learning levels and abilities. There are now four packages in the series, A through D, representing a sequence of eight skill areas that increase in difficulty.

1. The activities in the first unit provide an introduction to aural comprehension and reasoning. This unit is provided to increase the students' awareness of listening as an important process and to develop better listening habits as they perform tasks similar to those that are incorporated in later units.

2. Skills included in the second unit assist students with sentence and paragraph organization, identification of main ideas and topic sentences, the selection of relevant details and, ultimately, outlining pertinent details as an aid to studying at higher levels.

3. The introductory activities of this unit, "Using Word Relationships," review basic classification skills and labeling of classes with concept names. These activities provide students with practice in organizing similar and/or dissimilar material into rational or logical groups, manipulation of objects and events based on multidimensional attributes, and understanding the verbal descriptions related to classes, subclasses, and class members.

4. There is, by necessity, the use of instructions throughout the series of packages; the fourth unit provides activities that concentrate on the processes involved in followi[illegible]nd giving directions. Practice is provided for analyzing instructions. Key words that [illegible] interpreting instructions are isolated, analyzed, and then used in context with ap[illegible] tasks. Students receive practice in following oral directions, examining their reactions and responses, and making appropriate corrections. The students also construct instructions for others to perform to help them become more aware of the necessity for the use of precise language.

5. The activities of the fifth unit involve two related skills areas that contribute to improved comprehension of oral and written content: (1) identifying and locating specific details and (2) recognizing and identifying the central theme or main idea of a communication. In the first area, students are asked to identify descriptive characteristics of concrete objects and details in pictures. In the second, students receive practice in locating main ideas and selecting statements that support the primary topic.

6. Most of the prior units of work concentrate on prerequisite skills to higher order reasoning and literal comprehension. The activities of this unit provide practice in understanding implied meanings not given directly in the oral and written selections. Recognition of alternative responses and more divergent thinking experiences are incorporated in activities in this unit of work.

7. The ability to form mental pictures as oral and written content is presented. Aiding children in visualizing characters, settings, and events is the focus of this unit. Students are provided with opportunities to identify emotional states from pictures and descriptions, to interpret feelings from speech and body movements, and to generate ideas related to characters, settings, and actions.

8. The content of the final unit presents a series of skills that assist students with evaluating oral and written content using specific criteria. Students learn to examine and distinguish fact and fantasy, synthesize information to predict outcomes, recognize cause-and-effect relationships, identify overstatement and unfounded claims, and select alternative courses of action as solutions to the problems presented. Activities are also provided which require students to generate their own ideas and elaborate on subjects.

RD 040 006

SUBJECT AREA(S)

Language arts, including skills for listening, reading, reasoning, and writing; social studies, science, and selected mathematics content are subject areas included. Emphasis is placed upon comprehension of content in these areas.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for students of all abilities in grades 2-6, the product is currently being tested in grade 7.

GOAL(S) OR PUPOSE(S)

The goals of LAT-2 are: (1) To develop critical listening skills; (2) to develop skills related to literal and inferential comprehension of written materials; and (3) to provide practice in using critical thinking skills—drawing relationships, making inferences, making predictions, analyzing problem situations, synthesizing ideas, recognizing incongruities and analogies, making hypotheses, and evaluating situations, events, and actions.

PATTERNS OF USE

Language and Thinking Program, Level 2 A-D packages have four achievement levels for each of the eight skills areas. They are planned to be sequential and cumulative and to increase in difficulty from package A to D.

This sequential arrangement allows for the appropriate match of student skills and learning objectives both across and within classrooms. For example, a 2d-grade teacher may elect package B for most students, but also make use of packages A and C for some. Or a teacher may find package B appropriate in one of the eight skills areas, but package C more appropriate in another.

ASSESSMENT PROVISIONS

Students take an initial placement test to determine the appropriate starting point within the A-D package series, regardless of their grade placement. End-of-unit, mastery learning criterion tests, with guidelines for determining need for review or additional practice, are included with the packaged materials. More frequent assessment of student progress using student activity sheets is recommended to the teacher.

TIME REQUIREMENTS

Each of the LAT-2 packages is intended to be used approximately 30 minutes daily for 1 year. Four to five weeks is recommended for each unit of instruction.

IMPLEMENTATION PROCEDURES

Each package provides instructional activities which are introduced initially by the teacher. There are independent student activities; but the teacher is involved as a facilitator for discussions, makes use of appropriate question-asking strategies, and monitors student progress. The packages are planned to combine independent student activity with teacher guidance and assistance.

The guidelines for instruction, practice, and assessment are clearly stated in the teachers' guidebooks. Copies of all student activity sheets and printed transparencies are also included in guides. This approach is intended to assist teachers with management of the instruction and with selection of student activity sheets. Regular classroom teachers assigned to grades 2-6 can implement the program. The LAT-2 *Teacher Orientation Package* is available separately for use by teachers, school principals, coordinators, or curriculum specialists.

Summary Cost Information

Materials in the *Language and Thinking Program, Level 2*, are still in the prototype stage; therefore, no prices have been determined.

ASSURANCES AND CLAIMS

Assurances

There is no evidence of harm associated with the use of this product. After using a prototype of the Level 2 program, two-thirds of the children participating indicated that they would like to use similar materials again.

Presence of sexism, racial bias, or cultural stereotyping was not mentioned by teachers using the materials. In developing stories and illustrations for inclusion in the experimental version now in use, writers were careful to portray both males and females in a variety of roles. For example, boys are portrayed washing clothes and jumping rope, while a girl is shown fixing a bicycle. In a picture of a football huddle, the players could be either male or female and the directions refer to "his/her."

While the program is not yet ready for dissemination, the plans are to have the complete program stand alone, without assistance from the developer beyond the instructions provided in the teacher's guides and those supplied in the separate *Teacher Orientation Package*.

Claims

An experimental version of the *Language and Thinking Program, Level 2*, is currently being used in a number of urban and suburban schools. The version now being used represents a major restructuring of the prototype materials.

Responding to comments made by teachers, students, and classroom observers, more visual and tactile materials were included in packages designed for lower grades; and more varied stories and activities were added to packages used in upper elementary grades.

All of the teachers who used the prototype materials felt that there was a need for the content of the packages at the grade levels they were teaching. In addition, almost all of the teachers asked whether they could use the materials next year.

Based on recommendations from observers and teachers, the *Language and Thinking Program, Level 2*, is in continuing revision. Still to be added to the instructional package are placement and mastery measures. No quantitative data exist concerning either teacher implementation or student outcomes of the current version of the program.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set 8 sets of student activity sheets on ditto masters, 8 sets of criterion exercises on ditto masters, 13 sets of picture and word cards, and games	1 set per 30 students	Not determined	Student activity sheets on ditto masters consumable yearly	
Teacher materials: 2 teacher's guides, parts 1 and 2; 10 audiotapes; 1 set of classroom manipulatives, transparencies, transparency marker		Not determined		

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harriet Doss Willis, Program Director and Major Author

AVAILABILITY

Language and Thinking Program, *Level 2*, is scheduled for publication late in 1976. More exact information can be obtained from the developer before that time.

language and thinking:

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 007

LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 2, TEACHER ORIENTATION PACKAGE

A package to provide orientation for teachers to the LAT-2 instructional program

This package is used to provide teachers orientation to the content, skills, and approaches of the *Language and Thinking Program, Level 2* (LAT-2). The package consists of a coordinator's manual, three filmstrips, and three accompanying cassette tapes. The coordinator's manual provides an overview of the content of all four instructional packages and suggested guidelines for implementing a series of three orientation workshops for teachers. These guidelines include suggestions for participatory activities for teachers who will be using the instructional program. Demonstrations of instruction with students in classroom settings are provided on the filmstrips and narrated on the cassette tapes.

The emphasis of the package is placed on the sequential design and structure of the program and the opportunity for teacher flexibility within this structure. Emphasis is also placed upon the importance of teachers' implementing the instructional program in a positive emotional climate. The audiovisual demonstrations provide clear examples that the LAT-2 program works well with other instructional materials being used in associated subject areas.

SUBJECT AREA(S)

Language arts, including skills for listening, reading, reasoning, and writing; social studies; science; and selected mathematics content are the subject areas, with special emphasis on comprehension.

INTENDED USERS AND BENEFICIARIES

Classroom teachers of grades 206, curriculum specialists, master teachers, principals, or teachers serving as instructional coordinators are the intended users.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To provide teachers with a general introduction to the *Language and Thinking Program, Level 2, Teacher Orientation Package*; (LAT-2); (2) to give teacher leaders (coordinators, curriculum specialists, and principals) with appropriate guidelines for conducting teacher-orientation workshops concerning the use of LAT-2; and (3) to inform parents, whose children use LAT-2, of the scope and content of the program.

PATTERNS OF USE

LAT-2 workshops can be conducted by school districts that provide inservice activities before or during the first week of the school year. Whenever inservice training is not scheduled at that time, the workshop series may be conducted at any time throughout the school year.

The developers recommend that a series of three workshops be presented, the first one occurring prior to instruction of the materials. The second and third workshops can be planned on the basis of teacher progress and need during the eight instructional units.

ASSESSMENT PROVISIONS

Sample workshop and package questionnaires are included in the appendix of the coordinator's manual for the purpose of collecting feedback from workshop participants.

TIME REQUIREMENTS

Three 2-1/2-hour workshops are recommended.

IMPLEMENTATION PROCEDURES

Orientation procedures and implementation guidelines for conducting workshops are explicitly stated in the LAT-2 coordinator's manual.

Personnel Required for Product Adoption and Implementation

A classroom teacher, curriculum specialist, or principal designated as a coordinator can implement the guidelines of the orientation package.

A classroom teacher may use the package independently for self-orientation.

ASSURANCES AND CLAIMS

Assurances

Assurances of harmlessness cannot be given at this time since the product is still being developed. No trials of any kind have been made.

In the materials being developed, attention is given to avoiding sexism, racial bias, and cultural stereotyping. In the coordinator's manual, neither teachers nor children will be referred to with the generic "he" and "she." The accompanying filmstrips will feature teachers who are young and old, black and white, female and male. Similarly children of different races and backgrounds will be shown using the LAT materials all together.

This product is intended to be used by individual teachers, in workshops conducted by curriculum specialists, or by teachers without assistance from the developers.

Claims

Since this product is still being developed, there are no claims of effectiveness either in terms of product development or standard outcomes.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher orientation package Coordinator's manual 3 filmstrips 3 cassette tapes	1 per school	*		

*Materials in *Language and Thinking Program, Level 2, Teacher Orientation Package* are still in prototype stage. Therefore, no prices have been determined.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harriet Doss Willis, Program Director and Major Author

AVAILABILITY

Language and Thinking Program, Level 2, Teacher Orientation Package **is scheduled for publication late in 1976. The material will be copyrighted. Until then, contact the developer for information:**

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St Louis, Mo. 63139

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 008

MAKING JUDGMENTS

An instructional package that teaches students in grades 6-9 skills of critical thinking

Making Judgments is an instructional package that teaches students in grades 6 through 9 the skills of critical thinking. Its objective is to help students use concepts, rules, and strategies to make rational decisions about the reliability, relevancy, warranty, and sufficiency of information. Through use of the package, students should become more competent in their ability to solve problems and make decisions.

The package is divided into five independent courses varying in length from five to six lessons each. The first course, "Conflict," introduces specific principles for assessing argumentative assertions and value judgments. The second course, "Judging," deals with the principles for assessing evidence and testimony, (e.g., as in a court of law). "Reporting," the third course, covers standards for judging factual reports and interpretations. The fourth course, "Advertising," presents criteria for evaluating the meaning of persuasive appeals and the validity of empirical claims. Finally, the fifth course, "Causation," instructs students in the skills of generating and testing causal inferences and determining proof.

Each course has been designed: (1) To teach a set of evaluative skills; (2) to teach a strategy for evaluating a certain kind of communication, issue, or body of evidence; (3) to acquaint students with the responsibilities involved in a particular occupation or role; (4) to give students the opportunity to assume these responsibilities in a problem-solving or decisionmaking situation; (5) to give students practice in applying learned skills in a variety of content situations; and (6) to provide for practice of learned skills in a group situation. In general, each course begins by asking students to make simple discriminations and culminates in more sophisticated learner-directed problem-solving activities. Objectives are arranged to provide a cumulative learning experience within and across the lessons of each course.

Student materials consist of programed lesson books, workbooks, games, and objective-referenced tests. Student responses to lesson book questions are recorded in the workbook. Correct answers and feedback in the workbook are printed in invisible latent-image type. The ink is made visible when "developed" by a special felt-tip pen. There is also a teacher's guide that includes handouts and directions for group activities such as discussions, competitions, simulations, paper-and-pencil exercises, and role playing. Self-pacing lessons are designed to be worked on individually; games are small-group activities.

Lessons and activities for each course have been designed to fill a 45-minute class period, two or three times a week for 6 weeks. The courses may be used individually or in any sequence desired.

SUBJECT AREA(S)

Critical thinking.

Subject areas include: Distinguishing between statements and arguments about facts, tastes, and value judgments and settling each kind of argument; assessing the reliability of evidence and testimony; evaluating news reports and editorials and detecting techniques of slanting; identifying persuasive appeals and techniques and evaluating the warranty of claims; generating reasonable hypotheses, evaluating hypotheses against data, testing and revising hypotheses, inferring from data, and generating valid research designs.

INTENDED USERS AND BENEFICIARIES

The package has been developed for average or above-average students in grades 6 through 9.

GOAL(S) OR PURPOSE(S)

Students who master the concepts and rules presented in the package will have the intellectual tools necessary to make rational decisions and sound evaluative judgments in: (1) Resolving interpersonal conflict, (2) evaluating evidence and testimony, (3) interpreting facts and opinions, (4) evaluating persuasive techniques, and (5) testing hypotheses.

PATTERNS OF USE

Making Judgments provides for a mixture of individualized instruction and active group practice and discussion. Lessons are basically self-administering and self-paced. The package may be used as a two-semester program, or individual courses may be embedded in a social studies, reading, language arts, or science curriculum. Courses may be used in any sequence and their length varied by expanding or reducing the number of activities.

ASSESSMENT PROVISIONS

The package contains pretests that measure the student's critical thinking abilities before beginning work in a course and posttests that measure the student's competence after completion of a course. Both tests are objective referenced. Also, student journals contain short evaluative measures in the form of self-check quizzes and opinion surveys.

TIME REQUIREMENTS

The lessons and activities in each course have been designed to fill a 45-minute class period, two or three times a week for 6 weeks. Each course takes about 15 instructional sessions to complete.

IMPLEMENTATION PROCEDURES

Making Judgments can be used in any kind of school setting including open classroom, traditional classroom, and learning center. The package is completely self-contained and self-administering and requires no external assistance for successful implementation. No special teacher preparation is necessary beyond a basic familiarity with the package content.

ASSURANCES AND CLAIMS

During a 3-year testing period involving over 1,000 students, *Making Judgments* materials received no complaints of harmful effects from students, teachers, evaluators, or parents. The latent-image pens that come with the package are nontoxic, and the printed matter precludes risk of physical harm. No evidence or suggestion of psychological or sociological harm was found in the testing.

Particular effort has gone into developing an equalitarian version of the *Making Judgments* package. Stereotyped male/female roles have been avoided. There is a balanced mix of race, sex, and age in all problem-solving examples and their accompanying illustrations. Religious and socioeconomic references are absent from the package.

The *Making Judgments* package has undergone successful classroom use in various parts of the United States without the assistance or in-locus direction of the developers. The lessons themselves are self-administering, as are the games and the student journal puzzles and quizzes which also minimize teacher assistance.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Lesson books	1 per student	To be announced	Reusable	
Workbooks	1 per student	To be announced	Consumable	
Latent-image pens	2 per student	To be announced	Consumable	
Game or simulation	1 for every 4 students	To be announced	Reusable	
Teacher's guide with activity descriptions	1	To be announced	Reusable	
Student's journal	1 per student	To be announced	Consumable	
Pretests and posttests	1 of each per student	To be announced	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

John W. Thomas, Project Director

AVAILABILITY

The final version of the "Conflict" and "Causation" courses in being field tested. Results will be tabulated by June 1975. The "Advertising," "Reporting," and "Judging" courses have been field tested and are now undergoing fine editing for publication.

The developers are opening negotiations with prospective publishers. Anticipated publication date is 1976, and the cost is to be determined.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 009

THE PERCEPTUAL SKILLS CURRICULUM

A set of four programs to teach preschool children basic skills before they enter formal instructional programs

The *Perceptual Skills Curriculum* comprises four instructional programs: *Visual-motor*, *Auditory-motor*, *General-motor*, and *Letters and Numerals*. Each of the four programs is designed to teach a specific set of skills—skills that characteristically emerge as children develop and that have been shown to facilitate primary grade achievement. The purpose of the curriculum is to insure, insofar as possible, that children acquire these basic abilities before they enter formal instructional programs in reading, spelling, and arithmetic.

The curriculum is the outcome of 5 years of empirical research that successfully addressed the following questions: (1) Which perceptual skills, if any, appear to be directly related to primary grade reading and arithmetic achievement? (2) Can these skills be taught in cases where development appears to be delayed? (3) When skills are taught, can the effects of that learning be observed in the child's reading and arithmetic achievement? In other words, can transfer be effected? (4) Given affirmative responses to all of the above, can perceptual skills be taught by teachers in public school classrooms—as a perceptual skills curriculum?

The four programs of the *Perceptual Skills Curriculum* are housed in a six-volume set. Each program consists of instructional goals that are defined as behavioral objectives. The objectives are organized into hierarchies of levels. A criterion-referenced test accompanies each objective, thereby enabling the teacher to assess the child's competency in a specific objective prior to moving to more difficult tasks. Suggested learning activities are provided which have been shown to be effective in teaching the various objectives for the four programs.

The *Visual-motor* program comprises 24 objectives, organized into 9 levels. The program is designed to teach children how to analyze spatial patterns into their component parts and, further, how to map the relationships among those parts. A variety of manipulatives are used to teach the basic skills. These include 1-inch cubes, pegboards, parquetry blocks, and geoboards, as well as bottle caps, paste sticks, and other objects of related size and shape. They may be procured from any source and are generally standard equipment in most elementary schools. Visual-motor skills have been shown to be directly related to arithmetic and reading comprehension.

The *Auditory-motor* program consists of 33 objectives organized into 8 levels. It teaches children how to analyze acoustical patterns—spoken words—into their component parts and map the relationship of those parts. Learning experiences involve a variety of word games wherein the children learn to segment words into syllables, as well as into smaller units of sounds known as phonemes. The pertinence of this is obvious: As the child gains the capacity to identify the phonemes in spoken language, coding those phonemes with letters—as in reading and spelling—makes sense. These skills have been shown to be directly related to learning to read.

The *General-motor* program consists of 24 objectives organized into 3 levels. These include gross-motor skills, such as hopping, balancing on one foot, and skipping; and fine-motor skills, such as eye-hand coordination. These skills are taught in the context of games and other physical activities which can range from relay races to loom weaving. In a general sense, this part of the curriculum is designed to teach the children how to analyze their own bodies into their various parts and coordinate those parts effectively.

The *Letters and Numerals* program consists of 52 objectives organized into 4 levels. It teaches specifically what its name indicates—the symbols of the classroom. A variety of workbook pages gives a structured set of experiences in discriminating and printing letters.

Children enter into each of the programs through placement test procedures. They are tested in each program to determine appropriate starting levels. They are then assigned lessons that will teach them the next objectives in the sequence of the programs. As the children progress, they display their achievements by passing curriculum tests, thereby signaling to the teacher a readiness for more difficult experiences.

SUBJECT AREA(S)

There are four subject areas in the *Perceptual Skills Curriculum*, each of which is taught by a specific program. The *Visual-motor* program teaches basic spatial analysis and organizational skills. The child is given experiences which require analysis of the construction of a concrete pattern or a drawn pattern. The *Auditory-motor* program teaches basic acoustical analysis and organizational skills. It highlights the analysis of spoken language rather than nonverbal sounds. In the *General-motor* program, children are taught various gross- and fine-motor abilities in the context of games and other physical activities. The *Letters and Numerals* program teaches children to discriminate, name, and print from dictation the capital and lowercase letters of the alphabet.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used developmentally; i.e., with all children from preschool through grade 2. It is also intended for use with children of any age who are experiencing a learning disability that is related to visual and/or auditory perceptual dysfunction.

GOAL(S) OR PURPOSE(S)

The child successfully completing the *Perceptual Skills Curriculum* will be able: (1) To analyze concrete spatial information into salient components and map the interrelationships of those components; (2) to identify the phonological components of spoken language that are to be coded with letters in reading and spelling; (3) to demonstrate satisfactory motor coordination, particularly in those activities which are pertinent in the school environment; and (4) to show complete familiarity with the letters and numerals.

PATTERNS OF USE

The four programs can be presented in any order; however, they are designed to be implemented simultaneously. Within each program, the objectives are organized into levels, and levels into units. These are to be presented as they are sequenced.

Implementation of the four programs can vary depending upon where the curriculum is used. In a traditional classroom, where a single teacher manages the entire situation, group instruction is called for and is possible. In an individualized classroom, where an aide is also present, individual instruction is the more common approach. Here, too, certain programs continue to be best implemented as group activities. This is particularly true of the *General-motor* program.

The following summary of the major stages of instruction in the *Auditory-motor* program conveys the richness of detail and the careful sequencing that are characteristic of all the components.

At the lower levels of the program, the children are taught to march and clap their hands in time with recorded marching music. Following this, they learn to clap their hands once for each word in a spoken phrase of single-syllable words. They are then taught to "read" the dashes in any requested order. At the next level, two- and three-syllable words are used; the claps, and eventually the dashes, are now used to indicate syllables—"parts" of words. Once the capacity to "read" any dash on request has been acquired, the concept of embedded sound is introduced, initially with the syllable—eventually the phoneme—serving as the unit of analysis. Ultimately, these procedures lead to teaching the child to analyze streams of meaningful spoken words into their component parts, and demonstrate this skill by deleting portions of the words (syllables initially; ultimately phonemes) and voicing the others.

ASSESSMENT PROVISIONS

Children are initially pretested for placement purposes; that is, to determine the level at which they should enter into each of the four programs. From this information, the teacher makes appropriate assignments for each child. Thus, each child in a classroom could perhaps be working on a different objective within each of the four programs. The children's progress is monitored as they work through the programs. This is accomplished by use of the criterion-referenced tests that accompany the objectives.

TIME REQUIREMENTS

The product is intended to be used approximately 1 hour daily during the entire kindergarten year. It is intended to be used 30 minutes from one to five times a week, during grades 1 and 2. Data indicate that children will progress in direct proportion to the amount of time they spend within each program. However, overexposure is not desirable in that these are skills that must be assimilated rather than facts to be memorized.

IMPLEMENTATION PROCEDURES

The six volumes which make up the *Perceptual Skills Curriculum* provide most of the materials necessary for implementing the program. The additional materials needed are normally found in elementary school buildings—that is, blocks, pegboards, geoboards, and/or other manipulatives. Teacher training is provided in the introductory guide; no additional training is normally needed. If the program is to be used in an individualized way, a classroom aide is needed. However, schools can implement the program with normal staffing.

ASSURANCES AND CLAIMS

Assurances

The *Perceptual Skills Curriculum* was used, during its development, with approximately 4,000 children in 7 school districts. There have been no instances reported where harm of any sort—physical and/or psychological—resulted from the program. The curriculum is asexual and contains nothing that could be construed as perpetuating racism or any other bias. The curriculum is highly transportable. To date, approximately 3,000 have been sold and are being used in all areas of the United States and several other countries.

Claims of Effectiveness

Evidence indicates that the *Perceptual Skills Curriculum* is effective in several areas: (1) Students trained using this curriculum show significantly greater improvement in perceptual skills as measured by repeated administrations of standardized perceptual aptitude tests (e.g., Rutgers Drawing Test) than do untrained children; and (2) training in auditory skills is positively related to reading achievement, and there are indications that a similar effect may be found in other areas, such as arithmetic and conceptual skills.

These findings are based on a number of studies conducted during the course of product development which sought first to identify which perceptual skills were related to classroom achievement and then to determine whether such skills could, in fact, be taught in the classroom.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Perceptual Skills Curriculum (6 volumes): *Introductory guide* (volume I) *Visual-motor skills* (volume II) *Auditory-motor skills* (volume III) *General-motor skills* (volume IV) *Introduction to letters and numerals* (volumes V and VI)	1 set per classroom	69.50	Reusable	

Note: This set contains all master copies of tests and forms; the master copies are duplicated by each teacher as needed. Manipulatives may be purchased separately or constructed at school.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Jerome Rosner, Project Director

AVAILABILITY

The *Perceptual Skills Curriculum* was published in August 1973. Its copyright, dated 1974, is held by the University of Pittsburgh and is claimed until 1983. No future work is planned on the curriculum at this time. It may be purchased from:

**Walker Educational Book Corp.
720 Fifth Ave.
New York, N.Y. 10019**

INFORMATION CURRENT AS OF MARCH 1975 ■

SWRL/GINN INSTRUCTIONAL CONCEPTS PROGRAM (ICP)

A program which provides resources for teaching children conceptual skills fundamental to academic achievement

The *SWRL/Ginn Instructional Concepts Program* (ICP) provides research-based, classroom-verified resources for teaching children conceptual skills fundamental to academic achievement. The performance-based program is generally used at the kindergarten level.

The program provides comprehensive materials and procedures that assist the teacher in promoting each child's understanding of such concepts as color, size, shape, amount, and position. Program resources include:

Story cards—Each lesson begins with a teacher-read story based on the adventures of recurring theme characters. Concepts taught in the lesson are repeated frequently in the story.

Story posters—Illustrations accompany each story. These large cardboard posters give the children an opportunity to see and respond to examples of the concepts.

Concept books—Children receive individual concept books for each unit in the program. Illustrations include the unit theme character and examples of the concepts.

Games—More than 35 games are suggested for use with the program. These games are designed to maximize children's participation in activities related to the concepts.

Flashcards—Additional examples of the concepts are provided by flashcards. Each of the 138 cards illustrates 2 or more concepts.

Concept cards—Each teacher receives 120 durable cardboard triangles, circles, squares, and rectangles in different sizes and colors.

Criterion exercises—A criterion exercise is provided for each unit to help the teacher assess children's attainment of unit skills and to identify children who need additional instruction.

Practice exercises—Two practice exercises accompany each of the seven units. These exercises, which may be used by a teacher, an aide, a parent, or a tutor, provide additional instruction on unit content.

Program resource kit—The resource kit organizes teaching procedures, story cards, flashcards, games, theme character cards, and criterion exercise directions.

Teacher's manual—The teacher's manual describes program materials, procedures, and instructional sequencing.

Procedure cards—These cards outline recommended procedures for daily instruction, practice exercises, and criterion exercises.

SUBJECT AREA(S)

The program promotes an understanding of concepts basic to success in school.

INTENDED USERS AND BENEFICIARIES

ICP was developed for use with all pupils who have not yet attained its specific learning outcomes. It has been used successfully with a wide range of pupils in prekindergarten, kindergarten, and 1st grade.

GOAL(S) OR PURPOSE(S)

Pupils participating in the program learn to identify and to name examples of 96 concept words. Concepts taught in the program are basic to classroom instruction, as indicated by an analysis of primary level curriculums. The concepts pertain to colors, sizes, shapes, amounts, positions, premathematics, and prereading.

PATTERNS OF USE

The program is organized into 58 lessons divided into 7 units. Each unit includes lessons that describe two to four concepts. Generally, one lesson is taught each day. A criterion exercise and supplementary practice follow the final instructional lesson of every unit.

A lesson may be completed within one continuous time block, or the various activities comprising the lesson may be conducted at different times during a given day.

ASSESSMENT PROVISIONS

Criterion exercises administered after each unit of instruction enable teachers to regularly determine pupil attainment of specific program skills. Practice exercises are provided for assisting those pupils whose scores indicate they might benefit from supplementary instruction on concepts taught in the program.

The instructional concepts program Quality Assurance (QA) system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The system also provides a means by which the pupil proficiency attained with the program can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

Scheduling and length of individual lessons depend upon teacher determination of pupil learning needs and the amount of instructional time available. Generally, when one 20- to 30-minute lesson is conducted daily, pupils complete the program in less than 12 weeks of school.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install the program efficiently and effectively; for example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive and self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively, and to conduct this training within the time conventionally available to school personnel.

Also included in the installation system are materials and procedures for performing administrative functions related to the *SWRL/Ginn Instructional Concepts Program*. For example, there are suggestions for: Conducting briefing sessions for school boards, parents, and community members; ordering and distributing materials; scheduling the instructional program; conducting followup training sessions for teachers; monitoring the operation of the program during the school year; and integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 25 tryouts involving more than 14,800 classrooms and 443,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as quality assurance has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars		Replacement Rate and Cost	Source if Different from Distributor
		List price	*School Price*		
Teacher materials including story posters, teacher's manual, criterion exercise direction cards, procedure cards, theme character cards, flashcards, story cards, and game cards	1 set per class	120.00	90.00	Reusable	
Pupil materials including class record sheet, achievement stars, concept books, criterion exercise training booklet, criterion exercises, practice exercises, and concept cards	1 set per 30 pupils	92.00	69.00	Yearly	
Training kit including installation guide, trainer's guide, 2 35mm filmstrips with cassettes and scripts, display packs, and sample materials packages	1 set per district	56.32	42.24	Reusable (except display packs and sample materials packages same as below)	
Display packs and sample materials package	1 set per each 10 additional teachers	9.24	6.93	Yearly	
Training film	1 per district	80.00	60.00	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL/Ginn Instructional Concepts Program* (IC), copyright 1972, is currently available from:
Ginn and Co.
191 Spring St.
Lexington, Mass. 02173

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 011

LOGO TEACHING MANUAL

A self-instructional manual designed to enable students in grades 4-8 to learn computer language

The *LOGO Teaching Manual* is designed as a self-instructional manual for people learning the LOGO computer language. LOGO (developed at Bolt, Beranek, and Newman, Inc.) is a simple but powerful language that elementary school students (grades 4-8) can use successfully. The *LOGO Teaching Manual* is used in conjunction with a computer terminal that can access a version of the LOGO language. Students write programs that make LOGO do different tasks. Emphasis is given to problem-solving skills that are concretely illustrated by the task of programing a computer, including: Planning ahead, revising, extending, using feedback, reducing problems to simpler problems, and breaking problems into small steps.

The *LOGO Teaching Manual* is organized as a sequence of booklets, each of which teaches a new programing concept and provides numerous practice projects. Each booklet includes a review of prerequisites, and a final problem that can be used as a test. Each concept is taught in two separate booklets so that students normally have a choice of ways to learn the concept, and students who have difficulty with one presentation can try an alternative. The concepts taught are those of the LOGO program language, including procedures, subprocedures, recursion, inputs to procedures, and testing values for logical decisions.

SUBJECT AREA(S)

The *LOGO Teaching Manual* teaches general problem-solving skills such as stating the problem clearly, dividing a problem into parts, extending partial solutions, and using feedback.

It uses the computer language LOGO as the domain of interest and teaches the programing concepts of LOGO. The booklets that make up the manual include the following topics: Introduction, regular uses of print, fancy uses of print, procedures, changing procedure definitions, fancy designs, superprocedures, the alphabet project, recursive procedures, procedures with inputs, LOGO operators, procedures with changing inputs, MAKE, RANDOM, and REQUEST, number games and changing inputs, LOGO operators and testing, and number games and testing.

INTENDED USERS AND BENEFICIARIES

Students in grades 4 through 8 who are learning LOGO are the intended users. Older students learning LOGO as a first computer language would find the manual useful, but would not need to work on all the projects.

GOAL(S) OR PURPOSE(S)

The manual teaches students: (1) To use the LOGO language, (2) to formulate and solve problems of their own using LOGO, (3) to divide problems into subproblems, (4) to gather data and use feedback to solve problems, and (5) to enjoy using LOGO.

PATTERNS OF USE

Booklets must be used in prescribed order as indicated on the sequencing chart. Some booklets may be omitted if the concepts are mastered in other booklets. The final problem in each booklet must be completed before proceeding to the next booklet. The manual has been used in two 1/2-hour sessions per week for a school semester. More intensive use is possible, but less frequent use, especially for the early booklets would not be recommended.

ASSESSMENT PROVISIONS

Each booklet contains review problems that should be solved before proceeding to new material. If review problems prove difficult, remedial work is recommended. Each booklet also includes a final problem that should be completed before moving to a new booklet. In cases where the final problem proves difficult, an alternative booklet that covers the same material can often be selected.

TIME REQUIREMENTS

Fourth- and fifth-grade students can complete the manual in approximately 20 hours of study. Older students would probably progress more rapidly, especially if they knew how to type, a skill required for communicating with the computer. The individual sessions should last at least 1/2 hour.

IMPLEMENTATION PROCEDURES

In order to use the manual, the student must have access to a time-sharing computer that supports the LOGO computer language.

The teacher must be able to answer questions about LOGO, help students "debug" their work, and help with the mechanics of using a computer terminal. Teacher training would require 10 hours of work with LOGO, and can be provided almost entirely by the teacher using the manual as a student would.

ASSURANCES AND CLAIMS

The manual has not harmed any of the 30 students exposed to it. It contains no material likely to perpetuate sexual, racial, or ethnic biases. The *LOGO Teaching Manual* has never been used outside of the producer's direct control, so no assurance of replicability or transportability is possible at this time. The manual was used by one teacher who did not know LOGO before seeing the manual, and the teacher experienced no difficulty.

The manual has gone through four complete tryout-rewrite cycles in 4 years and represents the application of feedback from learners to each revision.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
LOGO Teaching Manual	1 per student	Cost of duplication	Reusable	

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Richard A. Roman, Project Director

AVAILABILITY

The *LOGO Teaching Manual* is available for duplication costs. Copyright is pending. For information, contact:

Richard A. Roman
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 012

SERIES COMPUTER ASSISTED INSTRUCTION PROGRAM (SERIES)

A sequenced program to give students in grades 2-12 experience in solving problems

The *SERIES Computer Assisted Instruction Program* is designed to give students experience solving problems and to teach certain patterns for extending sequences. The range of problem difficulty spans grades 2 through 12. Thousands of unique problems, encompassing approximately 400 different principles, are available. Problems are sequenced into 50 levels of difficulty, each representing several principles.

The SERIES program provides the kind of responsive environment that is impossible without a computer, and represents a way in which computers can contribute to changing the content traditionally taught in the schools. The emphasis in the program is on problem solving and thinking skills such as stating the problem clearly, gathering data, using feedback, creating and testing hypotheses, and knowing when to stop working on a problem.

Every problem is based on a rule for extending a sequence of terms that the student must infer. To help infer the rule, the student can ask for more data or guess the next term. The program provides feedback on the guess, incorporating it into the sequence if it is correct. Self-testing and data collection continue until the student asks to change to a new puzzle. Between problems, the student is given performance feedback, is told the level of the last problem, and is asked to choose a new level for the next problem. Problems are provided until the student stops for the day.

The rules that form the basis for the problems include:

1. Repeat the same terms forever (6,1,6,1,6,1,6,1,6,1,...)
2. Increment the last term in some alphabet, usually the English letters or the integers (5,6,7,8,9,10,...) (A,C,E,G,I,...)
3. Place terms from two sequences next to each other (1A,2B,3C,4D,5E,6F,...)
4. Take every other term of the new sequence from two other sequences (6,1,6,2,6,3,6,4,...)
5. Those rules can be combined to produce complex sequences (1,1,6,2,3,4,8,5,5,10,10,11,7,22,12,23,9,46,...)

SUBJECT AREA(S)

This program teaches problem-solving skills such as stating problems, gathering data, using feedback, and testing hypotheses. The content includes rules and problems from mathematics and English.

INTENDED USERS AND BENEFICIARIES

Students in grades 2 through 12 will find problems of appropriate difficulty in the program.

GOAL(S) OR PURPOSE(S)

The SERIES program is intended to teach students: (1) To use feedback more effectively, (2) to test hypotheses, (3) to gather data when needed, (4) to improve skills at extending sequences, and (5) to enjoy solving problems.

PATTERNS OF USE

The program can be used without restriction. Students choose their own levels of difficulty within the program, and may enter at any time.

ASSESSMENT PROVISIONS

Placement within the program is unnecessary since students choose and adjust their own levels of difficulty continuously. Progress within the program is reported to the teacher and student after each session. A progress graph is printed, separating the most current work from the earlier work.

TIME REQUIREMENTS

No restrictions are placed on the amount of time that students work. It is recommended that students spend about 5 hours on the program during the course of a school semester, but considerably different patterns of use could be equally beneficial.

IMPLEMENTATION PROCEDURES

To use the program, the school must have access to a time-sharing computer system capable of running programs written in FORTRAN IV. The program requires a teletype or teletype-compatible cathode-ray tube (CRT), and is enhanced if run on a CRT capable of erasing selective lines and positioning the cursor, such as the DATAPOINT 3300. Approximately 3 months of expert programing would be required to adapt the program to other time-sharing systems.

Teacher orientation, available from the developer, requires approximately 2 hours. Each student needs 1/2 hour on the terminal to learn the necessary management skills for accessing the program and performance within the program. Students work individually on the program. Any school organization that allows students to work at their own pace, on different objectives within the same classroom, can support work on the program.

ASSURANCES AND CLAIMS

In 2 years of pilot testing in a single school, no reports of harm to any students were received. The SERIES program is asexual and contains no materials that could be construed as displaying racial or ethnic bias.

The program has never been used outside of the producer's direct control, so no assurance of replicability or transportability is possible at this time. At the field test site, the program operates with minimal producer intervention, so that it is likely that the program will operate successfully at other sites.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Series Computer Assisted Instruction Program	1 per computer system	Cost of duplication	Reusable	

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Richard A. Roman, Project Director

AVAILABILITY

The SERIES program is available for duplication costs. Copyright is pending. For information, contact:
Richard A. Roman
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 013

DEVELOPMENT OF HIGHER LEVEL THINKING ABILITIES (HLTA)

An instructional system in which teachers learn strategies that increase students' abilities to solve problems

This low-cost, mass-diffusible, competency-based instructional system includes all materials and procedures for 36 hours of instruction. Organized into 28 instructional sequences, or units, it is conducted as an inservice workshop or preservice course. Teachers learn to use teaching strategies that increase the students' abilities to solve problems by categorizing facts, drawing generalizations from these facts, and applying them to unknown situations. As a result of teachers using these teaching strategies, students learn whys and hows, rather than memorize facts. They learn to use sound judgment and to solve problems creatively, as well as to assimilate large bodies of knowledge. Each of the teaching strategies is learned through a series of five steps: (1) The skill is introduced with the leader playing role of a classroom teacher and the teachers playing the role of students, (2) the theory of the skill is presented, (3) the skill is broken into its component parts and simulated in small groups, (4) the strategy is demonstrated with laboratory students, and (5) each teacher uses subject area skill with regular students.

SUBJECT AREA(S)

The subject area is developing higher level thinking abilities in students.

INTENDED USERS AND BENEFICIARIES

Classroom teachers and, indirectly, the students themselves are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional system is to prepare teachers to use teaching strategies which increase the abilities of students to solve problems by categorizing facts, drawing generalizations from these facts, and applying them to unknown situations.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Participants in this system need to have a classroom population with whom they may practice the skills and for whom they can prepare their material. Self-evaluation is employed throughout the materials.

TIME REQUIREMENTS

This system is organized into 28 units consisting of 36 hours of instruction. It may be conducted either as a campus course or as a workshop.

IMPLEMENTATION PROCEDURES

Small groups of students are necessary for the practice sessions; regular classrooms can be used for the laboratory experience. Ideally, participants in the program should spend full time for 2 weeks. However, options include schedules for a methods or an extension course. Details are presented in the instructor's manual.

Personnel Required for Product Adoption and Implementation

One instructor is needed for each 24 participants. Ideally, 12 to 15 participants is considered the optimum size for small groups.

The prospective instructor needs to be familiar with the instructional program and must, on the first training occasion, have the onsite assistance of an experienced trainer.

There are no special administrative considerations. If the class is conducted during school hours, arrangements must be made both for classroom use and released time of participants.

Three participants and one instructor is the minimum needed for product tryout. For full impact, it is recommended that all staff members of a target unit participate in the program.

ASSURANCES AND CLAIMS

Assurances

During a series of trial workshops, participants were repeatedly asked for feedback concerning the system. While criticisms were used to revise the system, there were no reports from participants, trainers, or implementers indicating that physical, psychological, or sociological harm had been experienced.

Social fairness issues were considered during interim rounds of trial and revision, resulting in some early modifications of this system. While the generic "he" is sometimes used when referring to persons of either sex, the system is generally fair and has been positively accepted as such.

This system was designed with the intention that it be relatively easy to use by persons whose roles involved the training of teachers. Developers of the system have observed that teacher educators who were familiar with the content of the system have had experience as trainees in workshops using the system, have had a cotraining experience with someone familiar with the use of this system, and have been able to satisfactorily conduct it. An alternate version of the system was created by the developers based on an early assumption that the first version might be somewhat difficult to conduct. Subsequent observation at field test sites indicated that both versions were relatively easy to use, while data from participants indicated no difference in outcomes.

Claims

Field testing of the materials began in 1967 and was continued on each of the two versions in various settings in the Pacific Northwest until their completion in 1970. Data collected from volunteer trainees who attended field trial workshops indicate the following results:

1. Of 290 trainees, 75 percent reported satisfaction with the training.

2. On a locally produced, 12-item cognitive test, the mean scores from 37 trainees were comparable to mean scores from a group of advanced trainers (experts) in the field.

3. Audiotapes of classroom discussions collected from 28 teachers before and after training showed statistically significant change on 5 of 8 behaviors presented in the system.

This system was developed over a 4-year period involving repeated rounds of trial and revision with K-12 teachers. The evaluation included pilot trials, interim formative testing, and a summative field test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	12.00		
Instructor's manual	1 for each trainer	17.25	Reusable	

A film on "dealing with feelings and contrasting cultures" is utilized in one unit. The instructor's manual recommends three specific possibilities (to be selected locally), or the instructor may have a suitable substitute available.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

John A. McCollum, Senior Author
Rose Marie Davis, Coauthor

AVAILABILITY

Development of Higher Level Thinking Abilities (HLTA) was copyrighted in 1972, and copyright is held by the Northwest Regional Educational Laboratory. It is currently available from the distributor:

Commercial Educational Distributing Services
P.O. Box 3711
Portland, Oreg. 97208

RD 040 014

FACILITATING INQUIRY IN THE CLASSROOM

An instructional system which trains teachers in behaviors which encourage students to inquire and become autonomous learners

This low-cost, mass-diffusible, competency-based instruction system includes all materials and procedures for 40-45 hours of instruction as a campus course or inservice workshop. The instruction is organized into 18 instructional sequences or units. Each sequence provides: Notes to leaders; leader preparation; list of participant materials; step-by-step procedures including rationale, timing, schedule and leader input; and participant handouts. While progressing through the sequences for learning each teaching technique, the participant learns to identify the technique, practices it, and finally practices applying it to a subject area in the classroom.

Teachers who complete the training program learn to perform 27 specific behaviors that encourage pupils to inquire and become autonomous learners. In broad terms, they develop abilities: To identify, practice, and use certain interaction patterns that allow students to inquire, help students grow in ability to learn independently, and reveal student attitudes and perceptions of inquiry processes; to identify what students do when they inquire, how they grow as inquirers, and to diagnose and evaluate where individual students are on a continuum of inquirer growth; and to carry out and assess their own learning.

SUBJECT AREA(S)

This instructional program discusses inquiry development of students.

INTENDED USERS AND BENEFICIARIES

Classroom teachers and, indirectly, the students themselves are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

This instructional program is designed to assist teachers in developing and improving the following abilities: (1) To identify, practice, and gain skill in using 18 inquiry tactical moves which allow students to inquire, help students grow in their ability to learn independently, and reveal student attitudes and perceptions of inquiry processes; (2) to identify what students do when they inquire, how they grow as inquirers, and diagnose and evaluate where individual students are on a continuum of inquirer growth; and (3) to try out, practice, and gain skill in helping one another learn.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Facilitating Inquiry in the Classroom has been deemed appropriate as an initial experience for classroom teachers and, therefore, has no prerequisites. Throughout the workshop, participants evaluate their learning by mutual feedback, self-testing (e.g., paper/pencil tests), and skill practice.

TIME REQUIREMENTS

The 18 instructional units are cumulative and intended for use in a 40- to 45-hour workshop or campus course.

IMPLEMENTATION PROCEDURES

As a minimum requirement, a leader needs to have completed the program as a participant. A qualified leader can conduct the program for a maximum of 24 participants.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

During a series of trial workshops, participants were repeatedly asked for feedback concerning this system. While criticisms were used to revise the system, there were no reports from participants, trainers, or implementers indicating that physical, psychological, or sociological harm had been experienced. This system became commercially available more than 2 years ago. The developer has received no reports of harm or perceived risks during this time.

Assurances of Social Fairness

Social fairness issues were considered during interim rounds of trial and revision of this system. While the generic "he" is sometimes used when referring to persons of either sex, the system has been positively accepted as fair.

Assurances of Replicability

This system was designed for relatively easy use by those whose roles involve the training of teachers. Given familiarity with the content of the system, a trainee experience in going through the workshop, and a cotraining experience with a person familiar with the system, the developer has observed that teacher trainers have been able to use the system successfully.

Claims of Effectiveness

Field tests of the materials in this system were conducted between November 1969 and October 1970, with the field test population of 143 persons from 6 test sites—2 in Alaska, 2 in Oregon, 1 in Washington, and 1 in Montana.

Data collected during the field trials provided the following results:

1. Of the 143 trainees, 90 percent perceived the training to be satisfying and worthwhile.
2. Of the 143 trainees, 81 percent reported the strategy taught as being practical and useful.
3. Trainees showed statistically significant cognitive gains on a locally produced concept test administered before and after the training. This gain was found to exist 6 months after training.
4. Two audiotapes of classroom interaction—one collected before training and the second after training was completed—showed that trainees exhibited more inquiry behaviors in their verbal interaction after the training than before.

Claims of Careful Product Development

This system was developed over a 4-year period involving repeated rounds of trial and revision with teachers. Evaluation included pilot trials, interim formative testing, and a summative field test where developers were not involved.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	10.50		
Leader's guide	1 for each trainer	15.70	Reusable	
Audio instructional materials	1 for each trainer	13.50	Reusable	

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

Fred E. Newton, Author/Developer

AVAILABILITY

Facilitating Inquiry in the Classroom **was completed in 1970. It is currently available from the distributor:**
Commercial-Educational Distributing Services
P.O. Box 3711
Portland, Oreg. 97208

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 040 015

INSTRUCTIONAL STAFF DEVELOPMENT

A multimedia program to train teachers to exhibit behaviors which lead to inquiry-skill development in students

The *Instructional Staff Development* (ISD) program is designed to train teachers to exhibit behaviors which lead to inquiry skill development in students. The program is designed for 1 school year and includes 18 instructional sessions, lasting 2-1/2 to 3 hours, plus 15 practice sessions of about 1 hour each. The instructional materials are divided into six components which are to be implemented in sequential fashion. A trainer's manual for each component is the focal point for implementation activities. The manual provides step-by-step instructions for preparation, execution, and evaluation of the training activities.

The training package also includes 32 transparencies, handout materials for teacher use, 30 minutes of model video tapes, and 1 hour of practice audiotapes. The teachers are viewed as learners in this program, and spend most of their time planning and presenting lessons in a microteaching session and assessing results with the help of the trainer to determine whether the lesson was carried out according to plan. Other trainer's responsibilities include conducting preassessment/postassessment and initiating and maintaining discussion without judging rightness or wrongness to help teachers conduct an inquiry into their own inquiry teaching.

SUBJECT AREA(S)

Teacher education, biology, and social studies.

INTENDED USERS AND BENEFICIARIES

Intended users and beneficiaries are junior and senior high school teachers who work with a wide range of learning levels. Although the program has been designed and field tested with biology and social studies teachers, University of Nebraska personnel have reported successful use of the program with elementary teachers and teachers in mathematics, art, and English.

GOAL(S) OR PURPOSE(S)

The ISD program has been designed to help teachers: (1) To control and modify their instructional influence behaviors; (2) to use cognitive or structuring skills and affective behaviors conducive to inquiry to plan lessons, present them, and evaluate the results; (3) to develop a series of sequential lessons which incorporate content, process, and teaching strategies; and (4) to increase effectiveness in choosing strategies to best support students in a variety of learning situations.

PATTERNS OF USE

The instructional materials consist principally of six component trainer manuals in the following sequence: Component I—Inquiry Orientation, Component II—Inquiry Influence, Component III—Inquiry Skills, Component IV—Behavioral Objectives, Component V—Pupil Centered Inquiry, and Component VI—Affective Behaviors.

The components were designed to be presented in the above order; however, there is no indication that the components could not be used in any other sequence. The sessions in each component, however, should be presented in the order of appearance.

ASSESSMENT PROVISIONS

Pretests and posttests are provided for each component to be used by the trainer to determine progress of each individual teacher. Opinionnaires are provided in each component for assessing teachers' reactions to the activities, instructional procedures, and assessment devices.

TIME REQUIREMENTS

Forty-eight hours of formal instructional time are required to complete the program and attain the expected results in the case of the average teacher. The program is designed to be taught during approximately 16 biweekly sessions of 3 hours each during the school year. In addition, 15 hours of microteaching are carried out as practice sessions. The developers recommend that the above schedule be carried out without major changes. However, in two implementation sites, it was found that concentrated sessions during the summer with occasional followup sessions were more effective than a full year of biweekly sessions.

IMPLEMENTATION PROCEDURES

Standard audiovisual equipment, including camera and technician, is required in sufficient quantities to provide for microteaching. Organizational requirements should include released time for the trainer to plan and conduct training. In considering special user requirements, it is suggested that the trainer catalog and use video tapes of the teacher participants, rather than model tapes, to overcome resistance often provided to the "ideal" classroom setting.

ASSURANCES AND CLAIMS

The ISD package was field tested during the school year 1971-72 at four sites in Nebraska. Five trainers were involved in the study along with 24 teachers (primarily social studies and biology) at the junior and senior high school levels. The purpose of the study was to assess the effectiveness of the program and trainers in bringing about changes in behaviors of teachers when the developers were not directly involved.

Assessments of the trainers' performances indicated that major activities in all components were implemented as written and all four trainers generally modeled inquiry behaviors throughout the six components.

Assessments of the teachers' performances indicated that all teachers used more inquiry behaviors and were able to demonstrate the pupil-centered inquiry model. In all cases, the amount of factual data was reduced while data interpretation and analysis increased. Use of specific affective inquiry behaviors by participating teachers and their students increased with "openness" behaviors occurring more frequently than "inquiry-orientation" behaviors. Students indicated that they enjoyed their work, exhibited increased "openness" behaviors, and tended to prefer inquiry to other learning strategies.

Feedback indicated that the audio-video components needed improvement, and these revisions were made. It was evident that some trainers were having trouble using the manuals. Based on actual work with some trainers at implementation sites, it was decided by McREL staff that 5 days' orientation and training time was necessary.

During the field test and developmental stages, teachers were asked to complete an opinionnaire to elaborate their successes, failures, and/or dissatisfactions with the program. Many of the statements included technical difficulties with manuals or equipment which were largely corrected during the revision process.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
ISD package (6 training manuals, 3 reels of video tape, 2 reels of audiotape, 32 transparencies, and carrying case)	1 per 10-12 teachers	300.00	Reusable	
Handout materials (included in package)		15.00 for replacement	Consumable	

DEVELOPER/AUTHOR:

Mid-Continent Regional Educational Laboratory (McREL)
7302 Pennsylvania Ave.
Kansas City, Mo. 64114

With cooperation of Teachers College
University of Nebraska
Lincoln, Nebr. 68508

Paul G. Koutnik, Development of Inquiry Skills (DIS) Coordinator, McREL

AVAILABILITY

The ISD package is currently available at McREL. Brochures, pricelists, and product descriptions are available at the laboratory. A 5-year developmental copyright, applied for in 1972, should remain in effect until 1977. A search is underway for a commercial publisher.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 040 016

MINICOURSE 9: HIGHER COGNITIVE QUESTIONING

A training course for preparing teachers to help students (grades 4-8) to think carefully and logically

Minicourse 9: Higher Cognitive Questioning is one of a series developed by the Far West Laboratory for Educational Research and Development. Minicourses are short teacher-training courses that use the microteach technique to improve specific teaching skills. Microteaching, in whch teachers are video taped while practicing short lessons with a small number of students, originated in the Stanford University intern program. The method is an attempt to get teachers actively involved while they learn and to let them learn "by practicing new skills, rather than hearing or reading about them."

The purpose of *Minicourse 9* is to train teachers of grades 4-8 to make greater use of higher cognitive questions. By asking students to support their generalizations, to make predictions, and to give opinions, teachers can help children develop their abilities to think carefully and logically about a subject. It is generally agreed that it is easier for teachers to determine whether students know answers than to judge their use of the information to solve new problems. Past studies show that as many as 60 percent of teachers' questions require students to recall simple facts, that about 20 percent require students to "think," and that the remaining 20 percent are procedural. Minicourse 9 is designed to help teachers reverse this past trend and to get students engaged in more complex thinking.

SUBJECT AREA(S)

The subject areas are inservice or preservice training in questioning students.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers of grades 4 to 8.

GOAL(S) OR PURPOSE(S)

The goals are to provide teachers with skills in higher cognitive questioning so that students will obtain a sense of competence, a feeling that they can answer difficult questions and have worthwhile thoughts, and a desire to contribute to discussions.

PATTERNS OF USE

Using Benjamin Bloom's taxonomy of cognitive objectives as a base, the developers have identified six types of questions commonly used by teachers: Knowledge, comprehension, application, analysis, synthesis, and evaluation. While *Minicourse 9* instructs teachers how to classify and write all six question types, most of the course emphasizes analysis, synthesis, and evaluation questions.

To acquire proficiency in asking these types of questions, teachers follow this instructional pattern: Read the appropriate section from the teacher's handbook outlining the skills to practice, view an instructional film showing how these questions can be used in classes and view a model lesson film showing correct use of skills, plan a 10- to 15-minute lesson using these skills, microteach the lesson, view the video tape to evaluate performance, prepare a new lesson plan, reteach and retape it, and re-evaluate the final performance. Transcripts of model lessons are printed in the handbook so that teachers may read many correct examples of using higher cognitive questions. To help teachers review the skills learned in this 15-day minicourse, followup activities are suggested for future practice.

Units are sequenced according to increasing difficulty. The course materials consist of teacher's and coordinator's handbooks and six reels of 16mm color film.

ASSESSMENT PROVISIONS

Teacher trainees evaluate their own performance. Learning exercises with answers are provided for each of the chapters in the teacher's handbook. Self-evaluation forms are also provided for each microteach and reteach segment. Direct supervision is neither required nor suggested.

TIME REQUIREMENTS

Fifteen days, one hour per day. Optional followup activities are provided.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide 20-minute blank video tapes, to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Audiotape feedback can be used by districts for which the purchase of a video taping system and video tape would be a financial burden. Research comparisons of video tape and audiotape feedback suggest that *Minicourse 9* can be used with audiotape without lessening its effectiveness. Because this course deals with verbal skills, the teacher does not need to rely on visual feedback to determine how well they are being learned. On the other hand, visual feedback is motivating to most teachers and enhances their interest in the minicourse.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Fifty-four teachers who participated in the main field test of this minicourse were asked to rate it according to usefulness. Fifty-two percent rated the course as much better than other inservice education experiences, 33 percent rated it better, and 15 percent rated it as equal. None rated it as worse than other inservice experiences. Ninety-six percent felt that *Minicourse 9* had improved their overall teaching. None of the participants felt that the course had detrimental effect.

Field testing with 80 teachers from 2 California school districts demonstrated that *Minicourse 9* increased the percentage of teachers' higher cognitive questions and that 2 student response measures—frequency and length of higher cognitive responses—both increased favorably as a consequence of the course.

More than 100 teachers in 27 schools from 10 districts in the United States participated in the operational field test of *Minicourse 9*. The operational field test is conducted without developer participation and is wholly coordinated by district or school personnel. This field test established the replicability and transportability of the course.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,200.00*	Reusable	
Teacher's handbook	1 per teacher	4.00	Consumable	
Coordinators' handbook	1	4.00	Reusable	
20-min. blank video tapes**	1 per teacher	22.00	Annually***	Any commercial dealer

*Films may be purchased or rented for 6 weeks for $200.

**If video tape recording equipment is not available, audiotape may be used

***A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about five times, each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Meredith D. Gall, Rita Weathersby, Authors

AVAILABILITY

***Minicourse 9: Higher Cognitive Questioning* was published by Macmillan Educational Services, Inc., in 1971. Copyright is claimed by Far West Laboratory for Educational Research and Development until November 15, 1981.**

Requests for preview materials and information regarding purchase or rental should be addressed to:

The Macmillan Company
Front and Brown Sts.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

ED 040 017

TEACHING CHILDREN HOW TO THINK: SYNTHESIS, INTERPRETATION AND EVALUATION OF RESEARCH AND DEVELOPMENT ON CREATIVE PROBLEM SOLVING

A guide to assist elementary teachers in material selection and development for problem solving and creativity instruction

This is a guidebook for elementary teachers to assist them in selecting or developing and using instructional materials for teaching creativity and problem solving. It also presents information on teaching creativity and problem solving to minority and educationally disadvantaged children. Published materials for teaching creativity and problem solving were reviewed and are presented in the book when there was supporting research or evaluation evidence, a sound rationale, or other signs of instructional effectiveness. Each published product is described in detail in the book, and information is given for ordering it.

Additional chapters in the book review well-established methods for teaching creativity and problem solving, techniques for teachers to use in developing creativity and problem-solving instructional materials, and approaches to the implementation of instruction in the areas of creativity and problem solving. There is also a brief review of the special needs of educationally disadvantaged children, of the most thoroughly researched and evaluated instructional material, and of some theoretical conceptions concerning creativity and problem solving.

SUBJECT AREA(S)

The subject area pertains to a book for teachers for self-study, for use as a reference resource in teacher education workshops, and for use in teacher education courses. It is concerned with teaching creativity and problem solving at the elementary level. The titles and length of the chapters are as follows:

(1) Chapter 1. Teaching Children To Think (5 pages)

(2) Chapter 2. The Rationale (10 pages)

(3) Chapter 3. Reviews of Instructional Material and Books for Teaching Creativity and Problem Solving (89 pages)

(4) Chapter 4. How To Get a Project Started in Your Classroom (27 pages)

INTENDED USERS AND BENEFICIARIES

This book is primarily for elementary teachers. However, it should also prove useful to junior high school teachers, principals, curriculum specialists, and teacher educators. It should be especially useful to people who are searching for new materials or methods for teaching creativity or problem solving.

GOAL(S) OR PURPOSE(S)

The teacher who reads this book should be able: (1) To select good published instructional materials for teaching creativity or problem solving, (2) to select good methods for teaching creativity and problem solving, and (3) to implement instruction in these areas in an elementary classroom.

PATTERNS OF USE

This book can be used by individual teachers or by a group of teachers wishing to begin, improve, or increase instruction in creativity or problem solving in their classrooms. The book can be read within 3 to 5 hours. It should also be used as a reference guide to instructional materials and methods for teaching creativity and problem solving. The book can be used effectively as a resource reference in connection with an inservice workshop on creativity and problem solving. Principals and curriculum specialists can use it as a guide in working with teachers to improve instruction in creativity and problem solving. The book can also be used as a supplementary source of information in education and psychology courses which deal with creativity, problem solving, and gifted children.

ASSESSMENT PROVISIONS

No special provisions have been made for assessing teachers' entry or postreading knowledge of the content. However, an attitudinal questionnaire is available for administration to teacher groups who have gone through a special workshop designed especially for this project.

TIME REQUIREMENTS

The material in this book can be read and studied carefully within 3 to 5 hours. However, teachers can use the book as a selective reference and guidebook without reading all the material. Thus, reading time might be cut to as little as 1 hour.

IMPLEMENTATION PROCEDURES

This book should be used in connection with a workshop for teachers. Teachers should be able to examine the book before the workshop and should be given familiarization activities in the workshop to assure that they understand the features and resources of the book.

MATERIALS AND EQUIPMENT

No other materials are required in addition to the book. However, a supporting workshop requires a slide projector, four professionals to conduct the workshop, and an assortment of illustrative books and instructional material which teachers can examine while they are reading product descriptions in the book.

ASSURANCES AND CLAIMS

Assurances

This product is undergoing field trials at the time this description is being written. Careful examination by a consultant and project staff indicates that the product is free of any biasing information and that it should not induce negative attitudes or reactions in teachers.

Claims

Since the field trials are still in progress, the evaluative evidence is not yet available.

DEVELOPER/AUTHOR:

Purdue University
West Lafayette, Ind. 47906
John F. Feldhusen, Project Director

AVAILABILITY

***Teaching Children How to Think* is not yet available for sale or distribution. It should be available before the end of 1975.**

INFORMATION CURRENT AS OF MARCH 1975

RD 040 018

THINKING AND REASONING TEACHER DEVELOPMENT

A teacher training kit to promote the development of children's analytic thinking and problem-solving skills

Thinking and Reasoning Teacher Development is a teacher training kit designed for teachers of kindergarten and 1st-grade children. The program teaches skills in using methods and techniques to promote the development of children's analytic-thinking and problem-solving skills. Teaching skills included in the program are modeling processes, questioning, observing, and giving reinforcement and feedback with a focus on processes and thinking skills.

A teacher's manual includes: (1) An analysis of the problem-solving process; (2) a rationale for teaching each of the thinking skills, relating each skill to the problem-solving process; (3) suggested activities for teaching each thinking skill; (4) methods for designing activities for teaching each skill; and (5) teaching strategies found to be effective in teaching analytic-thinking and problem-solving skills. Included are sample behavioral objectives, questions for stimulating thinking skills, and narrative examples of lessons for each skill.

A trainer's kit includes a trainer's manual for conducting preservice and/or inservice workshop training sessions, including methods for individualizing the training; one video tape or film to motivate and interest teachers in developing children's analytic thinking and problem-solving skills; three video tapes or films, each focusing on a discrete analytic thinking skill such as observing, predicting and inferring, and thinking of unusual uses; and a video tape or film focusing on the problem-solving process. Also included are activities for teachers to reinforce skills addressed in the teacher's manual.

Teacher training usually focuses on subject matter. As a result, children usually learn thought processes incidentally. The product offers a systematic approach for teachers to build an awareness in children of thought processes that can be used in problem situations. Although teacher training concentrates on process teaching, teachers will integrate the focus on processes with the content being taught.

The training workshops are designed to interest teachers in using and building skills in process teaching. The training is offered in modules with emphasis based on concerns expressed by the participants. In order to meet varying learning styles of participants, participants may select from several modes of presentation (such as discussion groups, reading, writing, observing video tapes, and role playing) to meet objectives and competencies.

The teacher will integrate *Thinking and Reasoning* teaching methods into existing curriculums and design new activities with a focus on thinking skills.

SUBJECT AREA(S)

The development of the analytic thinking and problem-solving skills of young children is the subject area.

INTENDED USERS AND BENEFICIARIES

Teachers of early childhood education (K-2) who work with multicultural, low-income children are the intended users of the product because it helps them develop competence in using strategies to advance children's skills in observing and describing, in predicting and inferring, in determining relevant information, in creating unusual uses, in identifying problems, in generating solutions, and in testing and evaluating those solutions.

Of ultimate benefit are the children who have opportunities to develop and refine analytic thinking and problem-solving skills, while participating in meaningful activities.

The training kit was developed for use with the thinking and reasoning program, a curriculum for children in kindergarten and 1st grade. The training is of value to all elementary teachers, and ultimately all elementary-age children, because of the focus on thinking skills and processes.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To build an awareness in teachers of analytic thinking skills and problem-solving skills; (2) to develop teachers' skills and knowledge in process teaching; and (3) to stimulate the development of analytic thinking and problem-solving skills in children.

PATTERNS OF USE

The program can be used as preservice or inservice training independently or as supplement to other thinking and reasoning program materials.

The training activities can be conducted by persons designated by the program adopters. Training for trainers is available from SEDL. Teachers may adapt the program to their school organizational formats, but small-group instruction is recommended for activities designed by teachers.

ASSESSMENT PROVISIONS

Formal testing procedures are not included with the product. An evaluation process is underway (see "Claims").

TIME REQUIREMENTS

Approximately 14 hours of training is required. The training can be broken into blocks of 2 or 3 hours each for inservice training.

IMPLEMENTATION PROCEDURES

SEDL provides training for designated teacher trainers.

ASSURANCES AND CLAIMS

Assurances

The staff development package has been pilot tested with 18 teachers during the 1973-74 and 1974-75 school years. No reports of bias have been received by the multiethnic program staff from either the teachers, who represent three major ethnic groups (Mexican American, anglo, and black), or from the children who represent the same and other ethnic groups.

The ability of the teacher development package to stand alone will be tested by November 30, 1975.

Claims

Based on revisions of the 1974-75 evaluation and the subsequent fall 1975 evaluation, specified claims will be forthcoming. This package is following the same development process outlined for *Thinking and Reasoning Games*.

To date, two types of evaluation data are being collected: teacher evaluations and observer evaluations. Teacher evaluations are of four types:

(1) Teachers complete a concerns list prior to program implementation and again following the pilot test period in an effort to establish whether the teacher development materials met the needs of the teachers.

(2) A preservice evaluation measure assesses the extent of retention of information presented during preservice session as well as the participants' feelings about the session.

(3) Teachers complete a checklist following each lesson of the thinking and reasoning product, part of which deals with adequacy of the teacher development package to prepare for teaching the skills presented in the lesson.

(4) Teachers complete a user questionnaire at the end of the year, recording feelings of adequacy of their own development throughout the year.

Observer information will be gathered approximately 200 times throughout the 1974-75 school year in response to their preceptions of teacher proficiency in teacher development activities.

In addition, the teacher development package will be reviewed by a specialist external to the Southwest Development Educational Laboratory.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Trainer's kit including trainer's manual 5 video tapes, 1 filmstrip, 5 transparencies and print materials	1 per district	Material under development and not available	Reusable	
Teacher's manual	1 per district	Material under development and not available	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Murray S. Newman, Component Coordinator

AVAILABILITY

The product is undergoing pilot testing and it will be field tested by November 1975. The guide will probably be available in December 1975.

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

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INFORMATION CURRENT AS OF MARCH 1975 ■

EARLY CHILDHOOD EDUCATION

OVERVIEW

JAMES O. MILLER and SUSAN STAIRS and MICHAEL O'MALLEY

Emory University
Atlanta, Georgia

National Institute of Education
Washington, D.C.

Definition of the field

Early childhood education targets the age range from the prenatal period through 8 years of age, with the greatest functional emphasis being placed upon the 4- through 8-year period. In the public sector, the 4-year span from kindergarten through third grade is most heavily represented. The private sector tends downward to the 3-year level, with day care provided at times for infants and toddlers. Services are primarily delivered in a formal setting, under public auspices in the schools, privately in State-licensed churches, private homes, or proprietary centers. There have been publicly supported demonstration programs targeted toward the geographically isolated or very young through television and/or home visitor systems.

Trends

During the past decade and a half, the field of early childhood education has been undergoing change in scope, definition, and impact. Prior to 1960, early formal schooling was confined primarily to private kindergarten and nursery schools serving the economically affluent. The programs in these proprietary schools emphasized socialization-play curriculums leaning heavily upon the teachings of Froebel and the maturation concepts of developmental psychologists. Despite the selection bias inherent in those served, it was generally believed by the leadership of these programs that later school success was directly attributable to the preschool experience. This position was to be severely challenged during the 1960's.

In the late 1950's a host of converging social, economic, political, and intellectual forces focused the attention of the Nation on the importance of the child's early developmental years. The postwar economic recovery widened the gap between the affluent and the poor. The civil liberties movement demanded greater political equality and a more equitable social and educational opportunity. International political competition with Russia in space placed heavy demands upon the formal education system to produce scientists and technologists capable of meeting the challenge. The works of such educationists and behavioral scientists as Bloom, Bruner, Goodlad, and Hunt suggested that the neglected early years were far more critical and amenable to environmental influences on the development of intellectual competency than had previously been accepted. This heralded a change in curriculum focus.

Within this context, the Nation supported the Federal administration's high priority for education. Congress passed the Elementary and Secondary Education Act and the highly experimental Equal Opportunity legislation. In turn, these actions stimulated national interest and activity in early childhood education.

During the 1960's, early childhood education went quasi-public with such large-scale programs as Head Start. The initial impact was with children of the neglected poor in the 4- and 5-year age range. Programs were supported by massive Federal infusion of funds to State and local authorities on a categorical basis. A gradual enlargement to the age span occurred, downward to include prenatal, infant, and toddlers in the Parent and Child Centers program and upward through the third year of formal schooling in the Follow Through program. However, the curtailment of categorical aid in the 70's by the new administration, the economic crunch of the Vietnam War, the general recession, and the concomitant pinch on school revenues have not encouraged local and State governments to support preprimary programs.

Enlarging the populations to be served brought to question the traditional wisdom concerning curriculum. The emphasis shifted from maturation-socialization play content to a more balanced curriculum. Federal programs of the 60's reemphasized cognitive development and intellectual functioning. Also the exemplary research and demonstration programs placed a greater emphasis on theory and research in curriculum design. Unfortunately, teachers and program directors in the private sector remain relatively isolated from innovation and have little incentive for change. Equally unfortunate is the fact that innovators have yet to develop an effective dissemination network to generally improve curriculum throughout the field.

Federal programs have tended to develop differentiated staffing patterns, expanding the caretaking and teaching force to include trained professionals as well as paraprofessionals, and have supported a concerted effort to include parents as program partners. These practices have had a significant effect upon the public primary years of schooling (grades 1-3).

Federally supported programs have also emphasized bringing a total developmental team to support the child's progress. This has included the health care professions, social and welfare professionals, and others who could contribute significantly to the child's development.

Professor James O. Miller, who is the Director of the Division of Educational Studies at Emory University, Atlanta, Georgia, prepared the Overview sections on the state of the art.

The section on NIE products was prepared by Susan Stairs, Educational Program Specialist in Educational Equity, Multicultural/Bilingual Group, and Michael O'Malley, Acting Director of the Multicultural/Bilingual Group at the National Institute of Education, Washington, D.C.

EARLY CHILDHOOD EDUCATION

The excitement and promise of this accelerated activity have yet to come to fruition. At the end of this decade it seems unlikely that early childhood education has the political clout to compete effectively for an equitable share of the public education dollar. As a matter of public policy, the future is unclear. Perhaps if other States emulate California's example, the public will again be engaged to provide appropriate funding. Elimination of categorical funding has clearly dulled local early childhood education impetus. Lack of funding will undoubtedly have a tendency to constrict the population served, with a greater proportional share going to the more affluent.

The demand for out-of-home care may be expected to increase in the middle-income bracket. A startling rise in the number of women in the work force and the increase in single parent families will have a demand effect. Initially these demands may be met by the private sector. The private sector has been most impervious to change in curriculum improvement and program upgrading. Program standards are minimal standards, emphasizing health and safety practices. Increased cost of the delivery of services may force program directors to demonstrate effectiveness, which would have a salutary effect on the curriculum.

There is a current trend toward a much more militant posture by the professional organizations and the paraprofessional associations and unions toward early childhood education workers. One might expect greater activity in organization of these workers. Should such efforts be successful, one can expect control of entry into the paraprofessional and professional ranks to be fought for hard by the organizational representatives. There is little knowledge of the competencies necessary for effective professionals or paraprofessionals and thus for certification standards.

It appears unlikely and perhaps unwise that the major share of Federal R & D support should continue to be committed to further curriculum materials development. There is a far greater need for focused research and dissemination efforts.

Practitioner needs and further research

Early childhood education needs a long-term commitment by the Federal Government to support a basic focused developmental research program. There is a need for a far better roadmap of the child's course in the socialization process and a better understanding of the role of the significant adult in the educational process. Precious little is known about the effective behaviors and necessary skills of the caretaker.

Basic developmental research has been fragmented. Too little has been spent for analysis and synthesis of the research findings that exist. There needs to be not only a review, but also the translation of findings into practical suggestions and hints of direction for the practitioner. Only a focused effort and a long-term commitment can provide the basic knowledge which can be translated into effective practice.

The curriculum development effort and the products in hand which were generated during the 60's and 70's are practically unknown to the majority of on-line workers. Their mere existence does not mean their adoption and use. People implement. They must be exposed to, trained in, helped with, and inspired to change.

Both Sarason and Goodlad have pointed to the numbing isolation of the practitioner from knowledge, innovation, and exemplary practice. Provision should be made to combat this isolation and bring research theory and practice more closely together.

Longitudinal studies of program effects, including the course of individual development, should be a high priority item. In the past, such studies have not been popular, nor easily done. The English model, the National Child Development Study in Britain, has contributed immensely to our knowledge of educational intervention, and might be profitably studied for adaptation to our own peculiar problems. The technology exists for establishing data banks with uniform data collection formats. This effort could be planned and underwritten at the Federal level with the assistance of the various State agencies having responsibility for overseeing early childhood education programs in both the public and private sectors. Compelling evidence of the efficacy of early childhood education can best be gained through longitudinal study. The contribution of such research should strengthen the focused basic research program.

In the final analysis, it appears that the unique functions the Federal Government is best equipped to assume are: (1) a focused research effort, including the analysis and the synthesis of research findings for application by the practitioner and broad-gauge longitudinal studies which will provide applied and basic knowledge to the field; and (2) the dissemination of proven practice through effective consortium arrangements, perhaps making support contingent upon proven program improvement and demonstrable effectiveness. The Federal Government is the source of last resort when the field is a heterogeneous mix of public and private institutions, without substantial institutional or political constituencies.

NIE early childhood education activities

At the present time NIE has no unified program in early childhood education. Current NIE activities related to this issue crosscut all NIE program offices and often are embodied in large-scale projects whose scope includes but is broader than early childhood.

The most significant NIE activities in early childhood are conducted at three of the educational research laboratories and centers. The Research and Development for Adaptive Education Program at the Learning Research and Development Center (Pittsburgh, Pennsylvania) has three important early childhood components. The New Primary Grades Reading system uses a code-breaking approach to beginning reading with a mixture of synthetic and analytic phonics. Focused on prereading level children, the Perceptual Skills curriculum is concerned with the development of perceptual skills hypothesized to underlie reading through an instructional program. The Self-Schedule System component organizes the classroom program for self scheduling of instructional activities by young children.

The Individually Guided Education Program at the University of Wisconsin Research and Development Center for Cognitive Learning (Madison, Wisconsin) has two components which address early childhood and basic skills education: Prereading Skills Program focuses on processes that prepare kindergarten children for reading, including three visual and two auditory skills; the Reading Skill Development component adapts a skill-centered approach for managing reading instruction at the elementary level to pupil characteristics and needs.

The Early Childhood Program at the Southwest Educational Development Laboratory (Austin, Texas) is concerned with imparting skills and knowledge of child care to parents, carepersons, and other adults involved in performing services for children. It is comprised of three components: a parenting center model, a multimedia training package, and television spots on childrearing practices.

Two other important NIE projects in early childhood education are: (1) the Home Visiting with Mothers and Infants Program at George Peabody College (Nashville, Tennessee) which is designed to enable low-income mothers to offer more effective educational experiences for their 2- and 3-year-old children and (2) the ERIC Early Childhood Clearinghouse which acquires, indexes, and disseminates the significant educational literature for early childhood education.

CLASSIFICATION AND COMMUNICATION SKILLS CURRICULUM (PART OF THE EARLY LEARNING PROGRAM)

An individualized instructional program designed to teach preschool and kindergarten children basic skills in classification and communication

The *Classification and Communication Skills Curriculum* is an individualized instructional program which combines semistructured "prescriptive" learning with more open-ended "exploratory" learning. It is designed to teach preschool and kindergarten children the basic skills involved in: Matching like objects, classifying according to categories, and communicating relationships (e.g., big, little, wide, narrow) and concepts (e.g., color, shape). Children are taught the use of language in abstract thinking and the ability to discriminate and generalize on the basis of commonalities and differences.

The curriculum was designed under the assumption that children display a wide range of differences in their entering abilities and in the ways they acquire competencies. In order to provide learning experiences that are adaptive to individual differences, a curriculum must provide learning situations that can accommodate to the needs of individual students and, where necessary, teach the prerequisite skills demanded by the learning situation. The *Classification and Communication Skills Curriculum* is designed with careful attention to classroom organization and to the provision of a broad range of learning activities, so that the learning environment can respond to these individual needs and differences. This is accomplished by the integration of two types of learning, prescriptive and exploratory.

The prescriptive portion of the curriculum contains hierarchically sequenced lesson units that teach in a structured manner the basic matching, classification, and communication skills. Its major component is a set of learning "kits" containing manipulative and paper-and-pencil materials. The exploratory portion represents a more informal approach to learning which is responsive to children's own interests and rhythms and is meant to foster inquiry, independent thinking, and positive attitudes toward learning and school. Materials for this portion include original and commercially produced games which are keyed to the prescriptive curriculum and from which children are given an opportunity to select.

Active student involvement is an integral part of the *Classification and Communication Skills Curriculum*. Each student works directly with the learning materials and learns to participate in the management of activities. In general, the student is expected: (1) To complete certain tasks prescribed by the teacher, (2) to complete certain self-chosen tasks (e.g., exploratory learning activities), (3) to follow classroom management rules, (4) to locate learning materials and equipment independently, (5) to ask for help from the teacher and/or peers when needed, (6) to take diagnostic tests when asked by the teacher, and (7) to ask the teacher to check completed assignments.

The role of the teacher is important in the successful implementation of the curriculum. In the prescriptive portion, the teacher administers pretests, prescribes learning tasks according to test results, checks the child's progress with the learning tasks on a daily basis, and administers posttests. In the exploratory portion of the curriculum, the teacher serves in the role of facilitator by making activities available and advising and interacting with students according to their particular needs. The activities and functions of the teacher are described in a set of detailed teacher's manuals.

Ideally, implementation of the curriculum requires the presence of two adults in each class—a teacher and an aide. However, since the learning materials included in the curriculum have, to a large extent, been designed for independent use by individual students and require a minimum amount of teacher supervision, the curriculum can easily be adapted for use in classrooms which have only one adult available.

RD 050 001

SUBJECT AREA(S)

Classification, matching, communication of concepts and relationships.

Nine hierarchically sequenced units make up the prescriptive portion of the *Classification and Communication Skills Curriculum*. The instructional units are as follow:

Unit 1—Basic matching skills.
Unit 2—Shape and size discrimination.
Unit 3—Color naming.
Unit 4—Shape naming.
Unit 5—Advanced matching skills.
Unit 6—Size description (big/little).
Unit 7—Length description (long/short).
Unit 8—Height description (tall/short).
Unit 9—Width description (wide/narrow).

The exploratory component is made up of open-ended activities and games which are keyed to the nine units.

INTENDED USERS AND BENEFICIARIES

The curriculum is intended for use with preschool- and kindergarten-age children or with older children who have special instructional needs. The curriculum has been used successfully with children enrolled in both inner-city and suburban schools. Because explicit information as to the operation of the program is provided in the teacher's manuals, teachers with varying amounts of prior training can use the program.

GOAL(S) OR PURPOSE(S)

The *Classification and Communication Skills Curriculum* is designed to enable the young child to acquire functional language skills and to develop conceptual and abstract thinking abilities.

PATTERNS OF USE

The instructional units and tasks within each prescriptive unit are hierarchically arranged, enabling the child to move from unit to unit in a prescribed order and to complete the tasks within each unit according to an established sequence. In some cases, more than one unit or task within a particular unit is considered to be at the same level of difficulty within the hierarchy. When more than one component is available at the same level of difficulty, the child may complete these components in any order, but must complete all of them before moving to the next level of difficulty within the hierarchy. Some of the tasks involve group activity, while others are to be carried out individually or with one or two other children.

Exploratory games and activities are available at each unit level. The child may elect to work on one or more of these at a time, determined either by the teacher or by the child, according to the particular learning management system adopted in the classroom.

ASSESSMENT PROVISIONS

Pretests and posttests are provided for each unit and are an important adaptive feature of this program. Each child is pretested before entering the curriculum and is placed in the appropriate unit(s) according to the level of competence revealed by the test. Once placed in a particular unit, a child completes all learning tasks which were not previously mastered. Upon completion of the learning tasks, posttests are administered, and the child proceeds to subsequent units. The teacher's diagnostic testing manual provides explicit directions regarding the administration of pretests and posttests and placement of children in the curriculum according to test results.

TIME REQUIREMENTS

The *Classification and Communication Skills Curriculum* is individualized, and the student proceeds through the curriculum at an individual rate. Typically, the curriculum is completed by the majority of the children in a classroom by the end of 1 school year.

IMPLEMENTATION PROCEDURES

No special teacher training is required, but teachers should become thoroughly familiar with the curriculum in order to implement it smoothly and to draw upon additional tutoring materials (e.g., exploratory learning materials) which are available when needed.

Personnel Required for Product Adoption and Implementation

Implementation of the *Classification and Communication Skills Curriculum* ideally requires two adults in each class, a teacher and an aide. However, it can be easily adapted for use in classrooms with only one adult present. Detailed directions for use have been developed and are explicitly stated as a part of the curriculum.

ASSURANCES AND CLAIMS

Assurances

The *Classification and Communication Skills Curriculum* is a component of the LRDC early learning program. It has been field tested and used in the LRDC developmental schools in the Pittsburgh area over the past 5 years, as well as in the followthrough, field-testing network and the Head Start planned variation program. No harmful effects have been reported at any of these sites.

The curriculum does not appear to display any racial, religious, economic, age-group, or sex bias. Whenever pictures are used, an attempt has been made to portray males and females who are both black and white. Both "he" and "she" are used instead of the generic "he" in the curricular materials.

The relative ease with which the program can be implemented is evidenced by its continued use in the Follow Through and the Headstart Planned Variation Programs across the country over the past 5 years. At these sites consultants have been available to assist teachers with implementation on an inservice basis. However, the *Classification and Communication Skills Curriculum* should be replicable elsewhere without difficulty because of the detailed information and directions provided in the teacher's manuals.

Claims

Data taken from one of the LRDC developmental schools indicate that the *Classification and Communication*

Skills Curriculum is effective. In general, a large number of the children in the preschool and kindergarten classes are able to make substantial progress through the objectives of the curriculum within a single year. Improvement in learning, determined on the basis of pretest and posttest performance, is shown in those areas in which specific instruction has been provided by the curriculum.

The performance of children using the curriculum also compares favorably with comparison groups. In the inner-city developmental school affiliated with LRDC, a comparison was made between the achievement of students enrolled in the early learning program as a whole and that of students not enrolled in the program. The Wide-Range Achievement Test (WRAT) was selected as the end-of-the-year achievement test. The WRAT scores on the reading and mathematics subtests were found to be equivalent or better than the expected norms for those students enrolled in the Early Learning Program. Both the 1st graders and the kindergarteners scored at or about 5 months ahead of grade level. By contrast, 2d graders not in the early learning program had a median score 6 months behind their expected grade level, and 3d graders were from 6 to 9 months behind their expected grade level.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Student prescriptive learning kits (83 lesson boxes)	1 complete set per classroom	To be announced	Reusable	
Teacher's manual for prescriptive learning materials	1 per classroom	To be announced	Reusable	
Diagnostic testing kits with teacher's manual	1 complete set per classroom	To be announced	Reusable	
Unit games learning kits	Determined by teacher	To be announced	Reusable	
Commercially produced games	Determined by teacher	Varies	Reusable	Commercial producers
Teacher's manuals for exploratory learning materials: Unit games manual Commercially produced games manual	1 complete set per classroom	To be announced	Reusable	

DEVELOPER/AUTHOR:

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Margaret C. Wang, Project Director

AVAILABILITY

It is important to note that, although it was designed as a component of the early learning program and we strongly recommend that it be used in conjunction with the other components, the *Classification and Communication Skills Curriculum* can be adapted for independent use.

The teacher's manuals and learning kits for the *Classification and Communication Skills Curriculum* are ready to be published, and a "Publisher's Alert" has been sent out. Copyright is pending. Curriculum materials may be viewed at the LRDC developmental schools or at selected follow-through sites, a list of which is available from:

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Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 002

QUANTIFICATION SKILLS CURRICULUM (PART OF THE EARLY LEARNING PROGRAM)

An individualized instructional program designed to teach preschool and kindergarten children basic mathematics concepts

The *Quantification Skills Curriculum* is an individualized instructional program that combines semistructured "prescriptive" learning with more open-ended "exploratory" learning. It is designed to teach preschool and kindergarten children fundamental concepts and operations of mathematics such as counting, one-to-one correspondence, numerals, comparison of sets, seriation, ordinal position, addition, and subtraction.

The curriculum was designed under the assumption that children display a wide range of differences in their entering abilities and in the ways they acquire competencies. In order to provide learning experiences that are adaptive to individual differences, a curriculum must provide learning situations that can accommodate to the needs of individual students and, where necessary, teach the prerequisite skills demanded by the learning situation. The *Quantification Skills Curriculum* is designed with careful attention to classroom organization and to the provision of a broad range of learning activities, so that the learning environment can respond to these individual needs and differences. This is accomplished by the integration of two types of learning, prescriptive and exploratory.

The prescriptive portion of the curriculum contains hierarchically sequenced lesson units that teach the basic quantification skills in a structured manner. Its major component is a set of learning "kits" containing manipulative and paper-and-pencil materials. The exploratory portion represents a more informal approach to learning which is responsive to children's own interests and rhythms and is meant to foster inquiry, independent thinking, and positive attitudes toward learning and school. Materials for this portion include original and commercially produced games which are keyed to the prescriptive portion and from which children are given an opportunity to select.

Active student involvement is an integral part of the *Quantification Skills Curriculum*. Each student works directly with the learning materials and learns to participate in the management of activities. In general, the student is expected: (1) To complete certain tasks prescribed by the teacher, (2) to complete certain self-chosen tasks (e.g., exploratory learning activities), (3) to follow classroom management rules, (4) to locate learning materials and equipment independently, (5) to ask for help from the teacher, and/or peers when needed, (6) to take diagnostic tests when asked by the teacher, and (7) to ask the teacher to check completed assignments.

The role of the teacher is important in the successful implementation of the curriculum. In the prescriptive portion, the teacher administers pretests, prescribes learning tasks according to test results, checks the child's progress with the learning tasks on a daily basis, and administers posttests. In the exploratory portion of the curriculum, the teacher serves in the role of facilitator by making activities available and advising and interacting with students according to their particular needs. The activities and functions of the teacher are described in a set of detailed teacher's manuals.

Ideally, implementation of the curriculum requires the presence of two adults in each class—a teacher and an aide. However, since the learning materials included in the curriculum have, to a large extent, been designed for independent use by individual students and require a minimum amount of teacher supervision, the curriculum can easily be adapted for use in classrooms which have only one adult available.

SUBJECT AREA(S)

Beginning Arithmetic: Basic Number Concepts

Eight hierarchically sequenced units comprise the *Quantification Skills Curriculum*. The instructional units are as follows:

Unit 1—Counting and one-to-one correspondence to 5
Unit 2—Counting and one-to-one correspondence to 10
Unit 3—Numerals to 5
Unit 4—Numerals to 10
Unit 5—Comparison of sets

Unit 6—Seriation and ordinal position
Unit 7—Addition and subtraction
Unit 8—Addition and subtraction equations

The exploratory component is made up of open-ended activities and games which are keyed to the eight prescriptive units.

INTENDED USERS AND BENEFICIARIES

The curriculum is intended for use with preschool- and kindergarten-age children or with older children who have special instructional needs. The curriculum has been used successfully with children enrolled in both inner-city and suburban schools. Because explicit information as to the operation of the program is provided in the teacher's manuals, teachers with varying amounts of prior training can use the program.

GOAL(S) OR PURPOSE(S)

The *Quantification Skills Curriculum* is designed to present fundamental concepts and operations of mathematics in forms simple enough to be learned by every preschool child, yet broad enough to serve as a conceptual foundation for later work.

Specific instructional objectives are intended to enable the child: (1)To count, (2) to use numbers, (3) to make comparisons of set size, (4) to order and seriate sets according to size, and (5) to make partitions and combinations of sets.

PATTERNS OF USE

The instructional units and tasks within each prescriptive unit are hierarchically arranged, enabling the child to move from unit to unit in a prescribed order and to complete the tasks within each unit according to an established sequence. In some cases, more than one unit or task within a particular unit is considered to be at the same level of difficulty within the hierarchy. When more than one component is available at the same level of difficulty, the child may complete these components in any order, but must complete all of them before moving to the next level of difficulty within the hierarchy. Some of the tasks involve group activity, while others are to be carried out individually or with one or two other children.

Exploratory games and activities are available at each unit level. The child may elect to work on one or more of these at a time, determined either by the teacher or by the child, according to the particular learning management system adopted in the classroom.

ASSESSMENT PROVISIONS

Pretests and posttests are provided for each unit and are an important adaptive feature of this program. Each child is pretested before entering the curriculum and is placed in the appropriate unit(s) according to the level of competence revealed by the test. Once placed in a particular unit, a child completes all learning tasks which were not previously mastered. Upon completion of the learning tasks, posttests are administered, and the child proceeds to subsequent units. The teacher's diagnostic testing manual provides explicit directions regarding the administration of pretests and posttests and placement of children in the curriculum according to test results.

TIME REQUIREMENTS

The *Quantification Skills Curriculum* is individualized, and the student proceeds through the curriculum at an individual rate. Typically, six of the eight units are completed by the majority of children in a classroom by the end of 1 school year. The final two units are intended for advanced students and to introduce concepts customarily taught in 1st grade.

IMPLEMENTATION PROCEDURES

No special teacher training is required, but teachers should become thoroughly familiar with the curriculum in order to implement it smoothly and to draw upon additional tutoring materials (e.g., exploratory learning materials) which are available when needed.

Personnel Required for Product Adoption and Implementation

Implementation of the *Quantification Skills Curriculum* ideally requires two adults in each class, a teacher and an aide. However, it can be easily adapted for use in classrooms with only one adult present. Detailed directions for use have been developed and are explicitly stated as a part of the curriculum.

ASSURANCES AND CLAIMS

Assurances

The *Quantification Skills Curriculum* is a component of the LRDC Early Learning Program. It has been field tested and used in the LRDC developmental schools in the Pittsburgh area over the past 5 years, as well as in the Follow Through field-testing network and the Headstart Planned Variation Program. No harmful effects have been reported at any of these sites.

The curriculum does not appear to display any racial, religious, economic, age-group, or sex bias. Whenever pictures are used, an attempt has been made to portray males and females who are both black and white. Both "he" and "she" are used instead of the generic "he" in the curricular materials.

The relative ease with which the program can be implemented is evidenced by its continued use in the Follow Through and the Headstart Planned Variation Programs across the country over the past 5 years. At these sites consultants have been available to assist teachers with implementation on an inservice basis. However, the *Quantification Skills Curriculum* should be replicable elsewhere without difficulty because of the detailed information and directions provided in the teacher's manuals.

Claims

Data taken from one of the LRDC developmental schools indicate that the *Quantification Skills Curriculum* is effective. In general, the children in the preschool and kindergarten classes using this curriculum over several years show a consistent pattern of increase with age—in both the total number of instructional objectives mastered at the beginning of the school year (entry line) and the total number of objectives mastered by the end of the year (terminal mastery). Data show the typical 3-year-old mastering counting, numeration and one-to-one correspondence objectives; 4-year-olds advancing to the units involving seriation and comparison of sets; and 5-year-olds typically learning addition and subtraction operations for quantities up to 10.

The performance of children using the curriculum also compares favorably with that of comparison groups. In the inner-city developmental school affiliated with LRDC, a comparison was made between the achievement of students enrolled in the Early Learning Program as a whole and that of students not enrolled in the program. The Wide-Range Achievement Test (WRAT) was selected as the end-of-the-year achievement test. The WRAT scores on the reading and mathematics subtests were found to be equivalent or better than the expected norms for those students enrolled in the Early Learning Program. Both the 1st graders and the kindergartners scored at or about 5 months ahead of grade level. By contrast, 2d graders not in the early learning program had a median score 6 months behind their expected grade level, and 3d graders were from 6 to 9 months behind their expected grade level.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student prescriptive learning kits (48 lesson boxes)	1 complete set per classroom	To be announced	Reusable	
Teacher's manual for prescriptive learning materials	1 per classroom	To be announced	Reusable	
Diagnostic testing kits with teacher's manual	1 complete set per classroom	To be announced	Reusable	
Unit games learning kits	Determined by teacher	To be announced	Reusable	
Commercially produced games	Determined by teacher	Varies	Reusable	Commercial producers
Teacher's manuals for exploratory learning materials: Unit games manual Commercially produced games manual	1 complete set per classroom	To be announced	Reusable	

DEVELOPER/AUTHOR:

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Margaret C. Wang, Project Director

AVAILABILITY

It is important to note that, although it was designed as a component of the Early Learning Program and it is strongly recommended that it be used in conjunction with the other components, the *Quantification Skills Curriculum* can be adopted for independent use.

The Teacher's Manuals and learning kits for the *Quantification Skills Curriculum* are ready to be published, and a "Publisher's Alert" has been sent out. Copyright is pending. Curriculum materials may be viewed at the LRDC developmental schools or at selected Follow Through sites, a list of which is available from:

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INFORMATION CURRENT AS OF MARCH 1975 ■

THE EXPLORATORY LEARNING PROGRAM (PART OF THE EARLY LEARNING PROGRAM)

A program designed to teach children, preschool to 2d grade, to integrate skills that have been learned in other structured curriculums

The *Exploratory Learning Program* is designed to provide learning experiences in which children are encouraged to integrate the skills they have acquired in other structured curriculums by engaging in self-selected, self-defined activities and by interacting with peers in the course of learning tasks. The materials and activities of the *Exploratory Learning Program* emphasize general cognitive and psychological competencies that cut across subject-matter boundaries. They represent an informal approach to learning which is responsive to children's own interests and rhythms and which is meant to foster inquiry and independent thinking, along with positive attitudes toward learning and school. The program is designed to complement the structured instruction offered in specific curricular areas (e.g., in the *Quantification Skills* and *Classification and Communication Skills Curriculum of the Early Learning Program*) intended for use with children in preschool through grade 2.

The aims and objectives of the *Exploratory Learning Program* are incorporated in two types of learning options, activity centers, and special projects.

Activity centers are physically defined spaces in the classroom where materials for particular kinds of activities are available for self-selected use by the children. The teacher interacts with students within these centers in a less directive manner than in prescriptive curriculums, except where techniques for use of the materials are being taught. Typically, in addition to helping children manipulate the materials and equipment of the activity centers, the teacher intervenes to pose questions and set problems that extend the scope of learning and relate different activities to one another. Activity centers include some of the traditional early school activities, such as a sociodramatic play and role playing, creative arts, construction and block building, and a water-and-sand play. They also include centers for more "academically" oriented activities, such as listening activities (popular children's books are tape recorded in a format that is especially helpful to the child in following along in the book as the story is read), reading and language activities, and math- and science-related activities.

Special projects are sets of materials designed to encourage extended activity, both imaginative and practical, around some theme—for example, "Doctors and Nurses," "Post Office," "Police Station," "Food We Eat," "Growing Seeds," "Beauty Shop," and "Cooking." The projects are generally introduced one at a time and remain available for several weeks in order to allow the theme to be developed. New projects are introduced as interest in the established one wanes. Especially popular projects are reintroduced periodically throughout the year.

The *Exploratory Learning Program* is described in detail in a teacher's manual, which consists of two volumes, one dealing with activity centers, the other with special projects. The volumes contain specific sections for each particular activity or project, and each section provides detailed information regarding such matters as: (1) The learning objectives involved; (2) materials and resources available; (3) specifications for setting up and implementing the activity center or project; (4) specific skills that can be developed through use of the particular materials; (5) intervention strategies, such as questioning, that the teacher may use to enhance children's use of the materials; and (6) a description of the suggested learning activities. The teacher using this program serves in the role of facilitator by making activities available and by advising and interacting with students according to their particular needs.

SUBJECT AREA(S)

The *Exploratory Learning Program* emphasizes cognitive and psychosocial competencies that cut across subject-matter areas. These are learned in the context of specific activities and projects, which are listed and described in the teacher's manual as follows:

Activity Centers (Volume 1)

I. Creative arts activities

II. Construction and block activities
III. Listening, reading, and related language arts activities
IV. Science related activities
V. Math related activities
VI. Sociodramatic play activities

Special Project (Volume 2).
I. The post office project
II. The police project
III. The repairperson project
IV. The beauty shop project
V. The food and cooking project
VI. The doctor and nurse project
VII. The growing seeds and plants project

INTENDED USERS AND BENEFICIARIES

The Exploratory Learning Program is designed for use with children in preschool through 2d grade. It should be useful to any preschool or primary teacher interested in making available to students opportunities to generalize and extend formal learning experiences, as well as increase independence and control over their own learning.

GOAL(S) OR PURPOSE(S)

The *Exploratory Learning Program* was developed to promote the general goals of exploratory or extended learning. These goals are: (1) To provide a wide variety of learning experiences to meet the learning needs and interests of the individual student, (2) to enable each student to achieve mastery of a wide range of educational goals, and (3) to provide some curricular alternatives from which the student can make realistic choices.

The basic rationale lies in the belief that the quality of learning experiences and the utilization of opportunities to learn in school depend largely upon the type of learning environment open to the student.

PATTERNS OF USE

The *Exploratory Learning Program* was designed for use either as a component of the LRDC *Early Learning Program* or as a supplement to other learning approaches. Classroom teachers can use the manual as a guide in developing activities to meet student interests and needs and to promote the development of general cognitive and psychosocial competencies.

The manual suggests many ways exploratory activities and projects can be integrated into the classroom. The activities and projects can be used as a means of producing different levels of learning experiences and learning outcomes, and they can be adapted to meet different levels of competence in children and obtain different outcomes.

ASSESSMENT PROVISIONS

Activities and projects are to be made available to students on the basis of their particular needs, interests, and competencies. The decision to make an activity or project available to a student or group of students is made on the basis of teacher judgment.

TIME REQUIREMENTS

The classroom may be permanently arranged into a number of activity centers, or the centers may be constructed at various times throughout the school year. No time limit accompanies any of the projects or activities outlined in the teacher's manual. They are generally introduced one at a time, and remain available for several weeks in order to allow interest and use to be developed. New activities or projects are introduced as interest in the previous ones wanes. Especially popular activities or projects can be reintroduced periodically throughout the year.

IMPLEMENTATION PROCEDURES

The materials described in the teacher's manual are found in most existing classrooms. In designing the exploratory activities and projects, every effort has been made to use and adapt existing instructional materials from a variety of sources. Existing materials that are appropriate for specific purposes have been identified and appropriate means developed for incorporating and implementing them in classroom settings. The program is designed for use with a wide range of students and within a wide range of educational settings.

Personnel Required for Product Adoption and Implementation

Implementation of the *Exploratory Learning Program* ideally requires two adults in each class, a teacher and an aide. However, it can be easily adapted for use in classrooms with only one adult present. Detailed directions for use have been developed and are explicitly stated in the teacher's manual.

ASSURANCES AND CLAIMS

As a component of the *Early Learning Program*, the *Exploratory Learning Program* has been field tested and used in the LRDC developmental schools and the Follow-Through field testing network over the past 5 years. No harmful effects have been reported regarding any aspect of the exploratory component over this period of time.

The materials used do not appear to display any racial, religious, economic, age, or sex bias. Both "he" and "she" are used instead of the generic "he" in the manual.

The program can be used without difficulty because of the detailed information and directions provided in the teacher's manual. This statement is supported by the continuous, successful use of the exploratory component as a part of the LRDC *Early Learning Program* in Follow-Through sites and the Headstart Planned Variation Program over the past 5 years.

LRDC's evaluative studies of the *Early Learning Program* have reported positive results for the program as a whole and for its two curriculum components. The *Exploratory Learning Program* was in operation at the time of these studies and was not evaluated separately. Further research is necessary to determine specifically how the *Exploratory Learning Program* might have contributed to these findings.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's manual (2 volumes)	1 complete set per classroom	To be announced	Reusable	

DEVELOPER/AUTHOR:

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Margaret C. Wang, Project Director

AVAILABILITY

The teacher's manual for the *Exploratory Learning Program* is ready for publication, and a "Publisher's Alert," has been sent out. Copyright is pending. The program may be seen in operation at the LRDC developmental schools or at selected Follow Through sites, a list of which is available from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

It is important to note that, although this program was designed as one of the components of the *Early Learning Program* and we strongly recommend that it be used in conjunction with the other components, the *Exploratory Learning Program* can be adopted for independent use.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 004

CONCEPTS AND LANGUAGE PROGRAM

*Twelve curriculum units to stimulate intellectual and
social development for low-income multiethnic children
ages 5 and 6*

Concepts and Language Program provides a planned curriculum designed and prepared specifically for children who are entering school for the first time. Its multimedia materials include stimulating lessons for direct instruction, activities which encourage independent learning in children, and strategies and plans which help the teaching staff organize each day's instructional program.

As a comprehensive learning system, *Concepts and Language Program* assists young children to develop sensory-perceptual skills; to improve language skills; to develop thinking and reasoning skills; to develop and strengthen feelings of self-worth; to develop knowledge of family, community, and the extended environment; and to develop independent work skills.

These instructional goals are met through four lesson elements that encompass auditory, visual, motor (prewriting), and ideas and concepts learning activities. The design of the instructional product is based on theoretical and developmental knowledge of how young children learn. The sequences of activities have been tested and then revised on the basis of actual classroom use and feedback information from teachers and observers, and from evaluation of the children's performance.

The product calls for involving parents as partners with the teachers in helping the children develop.

Studies indicate that young children's intellectual and social development can be accelerated if they have the opportunity to manipulate objects, if their curiosity is stimulated and rewarded, and if they are exposed to an appropriate language model. Factors especially associated with school success are a high degree of adult-child contact, a high quality and quantity of language used in communicating with the child, and a high level of expectations for achievement which is reinforced by parental praise and encouragement.

The rationale for this product is based on children's need for these enriching experiences very early in life. The laboratory has designed an intervention strategy for a particular target population—multiethnic children from low-income communities, whose native language is English. The strategy is to promote the children's general development and especially to strengthen the skills they need to progress through the elementary grades. The product is designed so that the children build patterns of success in which learning becomes a desirable and attainable goal and school becomes an enjoyable and rewarding place to be.

SUBJECT AREA(S)

Twelve curriculum units comprise the product's lesson materials for direct instruction to children. The units are centered on the following themes:

1. School
2. Body Awareness
3. Self-Concept
4. Family and Home
5. Food
6. Clothing
7. Community Helpers
8. Transportation
9. Community Environment
10. Animals
11. Natural Environment
12. School

Although the lessons are varied and cover different content or skill areas, they are organized into units built around a single theme. Whenever possible, the learning activities in a unit complement and reinforce another by being related to the unit theme or to a particular skill. Each unit contains 20 to 30 lessons, for small-group instruction, in the following training areas: Auditory consists of lessons designed to sensitize the children to environmental sounds, to develop their listening skills, and to help them analyze words and sounds. In these lessons, the children learn to identify and discriminate sounds around them, to follow series of directions, to imitate intonational patterns, and to identify the initial sound of words. Visual includes training that develops the children's awareness and understanding of constant properties (e.g., color, shape, size), develops their understanding of the relationship of objects to themselves and to each other, and to the context of the entire visual field; and teaches the children to focus on, isolate, and identify a single object so they can analyze what they see. The lesson titles and purposes in the visual element relate to five specific skills—constancy, spatial relationships, part-whole and figure-ground relationships, classification, and visual memory. Motor includes two major types of lessons—gross and fine motor. Gross motor skills deal with the total musculature of the body or large portions of it, such as walking, jumping, hopping, and running. Fine motor learning activities include tasks requiring manipulation of objects, cutting, tracing, pasting, and coloring. Prewriting includes lessons designed to develop eye-hand coordination in tasks leading from writing basic line forms to writing letters and numerals. Lessons focus on teaching uppercase and lowercase letters. Ideas and Concepts focuses on developing language and cognitive skills. The lessons introduce concepts, expand ideas related to them, and incorporate skills that are related to a concept or to its application. The children acquire skills such as labeling, developing category rules, classifying on the basis of concepts learned, and learning the parts and functions of objects. Children also describe objects, narrate events, make explanations, generalize from particular instances, and predict what will happen in given situations. They use skills and knowledge acquired earlier to think about and solve new problems. Independent work activities include activities in which children work on their own after an initial demonstration of equipment or an explanation of a specific task. There is no continuing, direct teaching during the activities. Related activities provide children with firsthand experiences which relate to and supplement what has been taught in the curriculum. They are divided into two categories: Those which provide receptive experiences and those which provide expressive experiences. Field trips, pictures, movies, and books are all receptive experiences from which the children absorb new material and ideas. Expressive experiences include all forms of communication, both verbal and nonverbal, art, music, drama, and dance.

INTENDED USERS AND BENEFICIARIES

Concepts and Language Program has been designed specifically for English-speaking children from low-income communities who are entering school for the first time (kindergarten level). However, since the materials are available for purchase, they are being used satisfactorily with children of various ethnic and socioeconomic backgrounds.

A self-contained, instructional, staff package which accompanies the curriculum material was developed to assist teachers and administrative staff to implement the instructional program. The package contains an administrator's handbook primarily for school principals, a supervisor's manual for the designated supervisor in charge of implementing *Concepts and Language Program* in the school district, and a teacher's instructional package containing several manuals.

Although the instructional staff materials were designed to accompany the curriculum materials, four of the manuals—"Setting Up the Classroom," "Classroom Management," "Teacher Expectations," and "Getting Started"—can also be useful as a single product. College and university administrators as well as principals have indicated interest in using these products for staff training and college-related courses.

The parent activity materials were designed exclusively to involve parents in their children's development. They include a teacher-parent handbook that helps the teacher work effectively with parents. Parents are provided 12 activity packets consisting of learning games and other activities which they can use at home to reinforce their children's learning.

GOAL(S) OR PURPOSE(S)

The *Concept and Language Program* has five general goals: (1) To develop sensory-perceptual skills; (2) to develop language skills; (3) to develop thinking and reasoning skills; (4) to develop and strengthen feelings of self-worth; and (5) to develop knowledge of family, community, and the extended environment.

PATTERNS OF USE

Unit organization integrates the skills learned in the different types of lessons (visual, auditory, ideas and concepts, motor, related, and prewriting). Whenever possible, lessons in all areas have been planned to correlate with concepts introduced in the unit.

Within each skill area, lessons begin with the lowest order of skill and proceed systematically to higher levels. Related lessons do not necessarily occur sequentially within one unit or within one curriculum element. Because of the systematic buildup and integration of skills, it is essential that curriculum units be presented in order. Readiness skills are emphasized and sequentially presented throughout the entire instructional program.

Although not included among the seven major types of lessons or curriculum elements, other concepts are also introduced in certain lessons. For example, mathematics is incorporated into the body awareness unit by letting children count their fingers, toes, eyes, and ears. Many visual lessons involve prerequisite mathematical skills and concepts. Prewriting lessons teach the children to write numerals. Simplified health studies—washing hands, brushing teeth—introduce science. Other science and social studies concepts are included throughout the program, especially in ideas and concepts lessons. Therefore, teachers who are designated to teach these specific subjects may use these activities separately, either to introduce the concepts or to reinforce them.

ASSESSMENT PROVISIONS

Tests, along with learning and assigned and independent activities, are an integral part of the *Concepts and Language Program*. During the developmental phase of the program, test results were used primarily to judge which lessons were appropriate for the children and how the lessons should be taught. Testing serves two purposes. Test results are used to decide which lessons should be retaught and to evaluate the progress of the children.

Two kinds of criterion-referenced tests administered are unit tests and mastery tests. Unit tests are short tests given at the end of each unit to test the child's ability to meet some of the performance objectives of the lessons within the unit. Mastery tests are administered four times during the year to examine the child's learning across several units. The mastery test requires the child to generalize or transfer what has been learned to a different situation or problem.

The curriculum test manual contains a grid for recording pupil mastery on each item for each item for each test. This method of recording provides the teacher with a student profile chart of progress throughout the year.

TIME REQUIREMENTS

In general, the program materials require up to 3 hours per day. In allowing time for lessons, teachers are encouraged to take into account length and difficulty of the lesson, the children's attention span, and the degree of difficulty the children tend to have with a particular type of lesson.

Sample daily schedules which have been used successfully at different schools are provided for the teachers. Normally it takes about 2 weeks to complete a unit.

IMPLEMENTATION PROCEDURES

The *Concepts and Language Program* has been tested with 5- and 6-year-old children, but may be used with younger children who show the maturity of being able to work in a planned learning environment. It can also be used with older students who lack experiences related to their overall development.

It is recommended that each class have a supervising teacher and an assistant teacher who may be a paid aide, an older student, or an adult volunteer. Both teachers teach lessons from the curriculum usually to small groups of children.

Both the teacher and the children use all parts of the room for various activities. Different sections of the room are set up for reading books, role playing, arts and crafts, and block building.

The product provides a basic equipment list which indicates: (1) Required items for each classroom, such as a semicircular table, grease pencils, smocks or aprons for children, yarn, and hole punch; (2) required items which may be shared among classrooms, such as block building and manipulative objects, outdoor equipment, magnets, rhythm instruments; and (3) recommended equipment which is not required, such as tool box and tools, mix and match puzzles, nesting blocks, wooden cutouts of community workers. All required items must be purchased for classrooms (minimal list); therefore, a list of manufacturers with addresses is supplied. These materials and equipment are in addition to the variety of media provided by the product.

ASSURANCES AND CLAIMS

Assurances

During developmental stages, multiethnic children and teachers were used for testing the materials in an attempt to eliminate any possible harmful effects and social biases. The curriculum was tested primarily with the target population for which the product was originally designed, specifically, multiethnic children from low-income communities who were entering school for the first time. The program staff, which was of multiethnic composition, had frequent interaction with teachers to insure the exclusion of social, ethnic, and sex biases. Market success of the materials provides a basis for assurance of replicability and transportability.

Claims

During the 1972-73 school year, the *Concepts and Language Program* was tested in Tulare County (California) Public Schools, Saint Martin Parish (Louisiana) Public Schools, and Austin (Texas) Public Schools. A series of pupil assessment instruments was used, along with a user questionnaire, which was administered to teachers and aides in an attempt to assess satisfaction with the program and to identify problems in program implementation.

The data generally support the claim of overall product effectiveness, although some of the comparative data relating to product superiority were mixed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete set of materials including instructional manuals, site staff development manuals—tapes and filmstrips, teacher staff development manuals, teacher-parent handbook	1 set per classroom	351.00	Reusable	
Instructional manuals	1 set	45.00 for replacement set	Reusable	
Site staff development manuals—tapes and filmstrips	1 set	60.00 for replacement set	Reusable	
Teacher staff development manuals	1 set	21.00 for replacement set	Reusable	
Teacher-parent handbook	1 manual	6.00 for replacement	Reusable	
Parent-child activities	1 per family	4.00	Consumable yearly	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Reva P. Bell, Program Coordinator

AVAILABILITY

Concepts and Language Program **was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:**

National Educational Laboratory Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

CONCEPTS AND LANGUAGE

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 005

GETTING STARTED (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)

A training manual for kindergarten teachers that implements planned learning experiences for preschool children

Getting Started is a training manual that has been prepared in an attempt to incorporate the best efforts and techniques that teachers may use to introduce children to themselves and their classrooms.

The information gives a model of learning activities in order that children may get important learning experiences. This model includes daily and weekly planned schedules, mixing aesthetic experiences, outside play, and other activities into unique experiences appropriate for young children.

The model is organized by teaching days. The schedule is based upon suggestions made by experienced teachers, and it provides a framework which has been proven successful in numerous classrooms.

Getting Started encourages teachers to plan their days and weeks carefully, utilizing planned learning activities as a core. Its intent is not to discourage teachers who may know better ways to accomplish objectives, but to give assistance to those who may need a way, who may depart from planned learning, and who may wish to change their way for various reasons.

The design incorporates suggestions from both new and experienced teachers and from program staff observations in classrooms.

SUBJECT AREA(S)

The first 5 days include activities for acquainting the children with the classroom, establishing daily routines, and showing the children how to work in small groups. During the second 5-day period, the supervising teacher should become well acquainted with each child's performing level. The schedule provides test time for the supervising teacher, and activities for the assistant teacher to present to the class. These activities establish the routine for dividing the class into four groups of eight children each. This is the recommended group size for effective instruction.

Two types of activities are included in this unit:

(1) Orientation—Activities to assist teachers in introducing the children to daily classroom and school routines. The specific directions to the children should be repeated daily until the routines are firmly established. Instructions for demonstrating manipulative equipment that the children will use independently and for acquainting the children with specific areas of the school and classroom are also included.

(2) Lessons—Learning activities with stated objectives. The sequence of orientation may be changed to meet the needs of individual classrooms. Teachers may add any appropriate activities that are not included and omit those activities which they consider inappropriate.

Getting Started also includes material to assist teachers in planning their work. This material includes weekly plans, daily plans, schedules, and classroom arrangements. Lists of books for teachers and for the classroom library are suggestions for use with this unit. These lists may be used as a guide for selecting books related to other units which will be taught during the school year.

INTENDED USERS AND BENEFICIARIES

The product was designed primarily for kindergarten teachers who are implementing planned learning experiences and supervisors in charge of teacher training.

The product not only meets the needs of teachers utilizing programs such as individually guided education, but may also be used by research and development centers, curriculum specialists, teacher training institutes, and college and university instructors.

GOAL(S) OR PURPOSE(S)

The purposes of this model are: (1) To help teachers plan learning experiences for children, (2) to provide a classroom-tested model for new and experienced teachers, and (3) to provide a resource that will help teachers adapt organizational teaching techniques throughout the year.

PATTERNS OF USE

Getting Started is a self-instructional manual that can serve as a helpful resource throughout the year. This manual has also been serviceable for supervisors in charge of teacher training. It may be used by administrators, college and university personnel, and others linked with teacher training programs.

ASSESSMENT PROVISIONS

The sources of assessment for the model have been a user questionnaire, the classroom teachers utilizing the model, and instructional staff trainers. The program staff has sought reactions to the use of the model and the content during preservice and inservice workshops as well as site visits. This was done primarily with questionnaires and oral conferences. User satisfaction data were also collected after practical use of the model.

TIME REQUIREMENTS

The model is designed for completion in approximately 10 days. However, since this training manual is individualized, time completion will vary depending upon the users, class size, and amount of time it takes students to become oriented to the classroom and school routines.

IMPLEMENTATION PROCEDURES

Although the manual is primarily self-instructional, trainees may benefit from workshops at which detailed explanations and specific questions are addressed. To take full advantage of the individualized nature of the product, users should use the information to fit the teaching situation, for example, 1/2-day and 1-day programs.

ASSURANCES AND CLAIMS

Teachers and administrators have found this model appropriate for use with young children in open-classroom settings, individualized learning centers, and self-contained classrooms. The model seems to work equally well in each of these instructional environments, and has been used effectively in both self-contained and team-teaching strategies. It has been suggested that this model is particularly useful with individualized instructional programs involving young children.

The model was utilized by multicultural teachers. The program staff, also multicultural, reviewed the materials for biases, and an informal review of the model was made by an intern working in the program. Where biases were evident, attempts were made to correct the situations. Since marketing, the product was carefully reviewed in depth by school personnel who were expressing a desire for their schools to become demonstration centers. The program staff has found the model usable without training, therefore insuring replicability and transportability.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Training Manual *Getting Started*	1 per person	6.00		

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Reva P. Bell, Program Coordinator

AVAILABILITY

***Getting Started* was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:**

National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 006

CLASSROOM MANAGEMENT, K-1 (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)

A training manual describing teacher behaviors and attitudes that create an interesting and smooth-running classroom for grades K-1

Classroom Management is a training manual that describes those teacher behaviors and attitudes which create interesting and smoothly running classrooms. It describes how teachers can prevent misbehavior and increase work involvement. The manual includes ways of handling misbehavior and describes techniques for coping with special behavior problems.

Studies indicate that the successful teacher must be a good classroom manager, because teachers who cannot manage classroom behavior have little time for instruction. This is the rationale on which the Southwest Educational Development Laboratory has designed *Classroom Management*. Concise examples are given to help teachers control attention or behavior. These examples include ways of showing respect for children. The teacher helps the children distinguish between their feelings and behavior. Children are taught to accept normal feelings of anger or frustration, but at the same time the teacher makes it clear that these feelings do not justify physical hostility. Specific techniques for handling misbehavior are illustrated for teachers. Teachers role play, using recommended methods such as ignoring minor misbehavior, and the following "stop-it" techniques: Eye contact, touch and gesture, physical closeness, and praising or calling attention to good behavior. Teachers are familiarized with these direct intervention techniques to enable them to handle problems without calling attention to misbehavior and without interrupting teaching.

SUBJECT AREA(S)

Classroom Management consists of three chapters. Chapter 1, "Preventing Misbehavior and Increasing Purposeful Classroom Activity," describes for the user behavior and attitudes that have been found to prevent misbehavior and to increase purposeful classroom activity, such as respect for children, belief in children, careful planning, providing activities that match children's interests and abilities, explaining classroom rules, praising and encouraging good behavior, and focusing on children's learning rather than compliance.

Chapter 2, "Dealing With Misbehavior," emphasizes three principles of control: Showing respect for children even when dealing with misbehavior, avoiding punishment whenever possible, and considering the effects of one's own behavior. Specific techniques for dealing with misbehavior are listed for teachers.

Chapter 3, "Special Behavioral Problems," deals with special types of "problem children," children whose behavior problems are more deeply rooted than the everyday ups and downs observed in all children. Some of the more common types, along with suggestions for changing their behavior, are discussed in this chapter. The types include the defiant child, the inhibited child, the unresponsive child, the showoff, and the aggressive child.

INTENDED USERS AND BENEFICIARIES

This product was designed primarily to give assistance to kindergarten teachers and supervisors in charge of staff training. Teachers and supervisors who used the product have reported it useful for all teachers of young children.

Other potential users are coordinators of child development centers, students in university and college teacher training programs curriculum specialists, parents, and administrators and coordinators of school districts.

GOAL(S) OR PURPOSE(S)

The purposes of *Classroom Management* are: (1) To help teachers manage their classrooms effectively, (2) to provide helpful teaching techniques and strategies, and (3) to provide specific information that will help teachers discover the best way to handle classroom problems.

PATTERNS OF USE

Classroom Management is a self-contained, instructional staff package. It may be used by supervisors, coordinators, head teachers, or administrators for the training of other personnel. If used in this manner, specific instructions are given. It features frequent simulation and role play of basic techniques that the user must learn. *Classroom Management* is also a transportable, self-contained package that is organized in such a way as to be easily understood and used by teachers on their own.

ASSESSMENT PROVISIONS

The source of assessment for the *Classroom Management* product has been a user questionnaire employed by classroom teachers and instructional staff trainers.

TIME REQUIREMENTS

This product provides the basis for a 2-hour initial training session. Some supervisors conduct workshops throughout the year in which portions of the package are used continually. Individual teachers may use the package as a reference tool whenever needed.

IMPLEMENTATION PROCEDURES

The instructional package has been tested successfully with both individual teachers and supervisors in charge of teacher training. It is recommended that small-group sessions be used whenever possible so that trainers can respond to individual teacher needs.

ASSURANCES AND CLAIMS

The product was used initially by instructional staff trainers and teachers. They recommended that the product be made available to teachers at the elementary level.

The product was reviewed by multiethnic teachers and program staff members for biases. Biases were corrected when evident.

The product is usable without training and is assured to be replicable and transportable.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom management manual	1 per person	6.00 (price may change)	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Reva P. Bell, Program Coordinator

AVAILABILITY

***Classroom Management* was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:**

National Educational Laboratory Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 007

DARCEE PRESCHOOL PROGRAM

Materials for use with children from ages 3 to 5 providing planned activity sequences for preschool teachers

The Demonstration and Research Center for Early Education (DARCEE) at George Peabody College and CEMREL, Inc., have developed an approach to early childhood education that emphasizes how teachers can use physical environment, grouping, team teaching, positive reinforcement, and careful planning to bring about important cognitive and attitudinal growth in young children. The program is aimed at children from 3 to 5 years of age. Basic skills and attitudes are taught through a variety of small- and large-group activities. The activities are not prescribed by the DARCEE program; instead, teachers follow the DARCEE principles of sequencing, materials selection, team teaching, and planning to devise activities to achieve behavioral goals.

The program objectives are set out in an extensive recordkeeping book. This makes it possible for teachers to keep careful track of children's progress and to plan new activities to meet their needs. A set of 11 resource guides with suggested activities provides teachers with ideas. The resource guides are on such topics as "All About Me," "Plants," "Transportation," "Farm Animals," and "Seasons." A teacher's guide and evaluation materials help teachers implement the program successfully and judge their own progress.

An important feature of the DARCEE program is team teaching. The team consists of a lead teacher and one or more assistants. Each adult in the classroom functions in a teaching role. Each adult plans and schedules activities, works with small groups of children, and keeps records.

The *DARCEE Preschool Program* is an outgrowth of the early training project, undertaken in 1961 by Susan Gray and Rupert Klaus of George Peabody College. The early training project was among the first research intervention programs of the 1960's aimed at halting progressive educational retardation in disadvantaged children.

The instructional principles upon which the *DARCEE Preschool Program* is based are drawn, in part, from the developmental theory of Jean Piaget. Information processing of the phenomena of the child's environment is facilitated by relying on gradual presentation of material from the child's immediate to more remote surroundings. Also, emphasis is placed on having children match like objects, then recognize by pointing to a named object, and finally, identify (name) an object verbally. Such a sequence builds up the child's skills gradually without asking for mechanical or rote response.

The most important single element in a DARCEE classroom is a well-trained teaching team. Teachers create materials, plan and present activities, and structure the learning environment to be sure that children will achieve the stated behavioral goals of the program. The program essentials all involve how teachers should interact with children to bring about these goals.

Parent involvement is considered an important aspect of the DARCEE approach. However, specific materials and techniques for encouraging parents to become involved in their children's school experiences are not provided. They are left up to the teachers.

Teachers in a DARCEE classroom set a daily schedule. Each day they decide, during a planning and evaluation session, which activities will be used the next day. Activities are based on the current day's experiences and the level of mastery the children have shown in specific skills. Typically, the lead teacher holds sessions for the entire group of children at the beginning and end of the day. Large-group activities often concentrate on a subject matter unit of instruction, such as farm animals, autumn, or "my city." The class then breaks up into small groups with a teacher responsible for each one. Two small-group times are usually scheduled each day. At these times, children might do manipulative activities which supplement the unit teaching (such as making a model or coloring a picture), or other general skill building tasks (such as puzzles, weaving, visual patterning, math games, letter recognition). A special "structured free choice" time is offered each day—during this time children can choose among several activities.

Teachers in the classroom are responsible for keeping records and planning activities for the children in their small groups. Recordkeeping becomes very important, not only to document children's growth and progress, but also as a planning sheet for determining which kinds of activities to introduce next.

SUBJECT AREA(S)

Early childhood education: Comprehensive instructional model

The DARCEE program is a structured approach to preschool learning which relies heavily on teacher initiative in planning activities and making and presenting materials to achieve specific behavioral goals; it concentrates equally on cognitive and attitude development.

INTENDED USERS AND BENEFICIARIES

Kindergarten, day care, nursery school, and other preschool teachers are the intended users. The materials and activity ideas are aimed at preschool children, primarily 4- and 5-year-olds, although some 3-year-olds have also used the materials. Although field testing of the *DARCEE Preschool Program* (in 49 classrooms in 4 sites) focused exclusively on low-income children, the program is equally applicable to all preschool children. Because the program focuses on a set of behavioral objectives and does not insist on specific curriculum content, the DARCEE program can adapt easily to the needs of any ethnic or socioeconomic group and can be used with many commercially available curriculum materials.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To provide preschool children with the skills and attitudes they need to succeed in school; (2) to offer a program based on careful planning and predictable environments, where events are interrelated and experience builds upon experience and where teachers react positively to demonstrations of new skills; and (3) to give teachers the principles by which they can attend to children's individual needs and help them achieve, through planned activity sequences, important preschool objectives.

PATTERNS OF USE

The DARCEE program's objectives are arranged into four sequential levels of difficulty; a fifth level designates general or unsequenced objectives. Teachers are encouraged to follow the levels in introducing new skills and planning activities.

The topics of the 11 resource guides are generally sequenced, starting with topics from the child's immediate world and working toward the larger environment. Within each unit, activities begin with simple, concrete ideas and move to those that are more complex and abstract. However, a teacher is not expected to use all the activities in a resource guide (although the activities would probably be used in the order that is suggested). A unit may be omitted or other topics substituted as long as DARCEE sequencing principles are maintained.

As a system, the DARCEE program is comprehensive and instructional. The program presents a philosophy of teaching and presentation that is all a teacher would need to organize a preschool class. The exact activities and materials used to accomplish the set of objectives provided by the program is left up to the teacher.

ASSESSMENT PROVISIONS

Teachers being trained to use the DARCEE program are assessed in several ways to be sure they understand the principles of DARCEE instruction. The teacher's guide includes self-assessment exercises; a test is given at the conclusion of training, and an implementation measure can be used by any nonteaching observer to rate DARCEE classrooms on whether they conform to essential DARCEE principles.

Assessment provisions for children include pretesting and posttesting on the *Test for Assessment of Basic Skills*, a domain-referenced measure specially constructed to test the attainment of the DARCEE program objectives and on the Boehm Test of Basic Concepts. In addition, careful student recordkeeping is an ongoing part of the teacher's activities.

TIME REQUIREMENTS

Normally, the DARCEE program would be used as the entire preschool curriculum for 1 year of instruction.

IMPLEMENTATION PROCEDURES

Training sessions of varying lengths were used during field testing of the DARCEE program. Participants in 2-week sessions with the inservice training by DARCEE trainers or local coordinators were compared to groups who were simply given the materials to read and provided one inservice training meeting. All groups were able to implement the program, although those who had the training and a local coordinator tended to implement the program at a higher level and to improve in performance over the year. For this reason, the developer recommends that a local coordinator be used to oversee teachers in the DARCEE program, to run preservice and inservice training sessions. Personnel would also be needed to carry out pretesting and posttesting of children, if it is decided upon.

A complete trainer's guide is provided to help coordinators plan and implement preservice and inservice sessions. The trainer's guide is keyed to the extensive teacher's guide. The teacher's guide for the DARCEE program can be viewed as a minitraining course. It provides readable lessons, self-check exercises, and step-by-step instruction in the major features of the DARCEE program.

Personnel Required for Product Adoption and Implementation

One lead teacher and at least one instructional aide are needed to implement each DARCEE classroom.

To achieve the highest level of implementation, a local coordinator should be assigned to train and advise DARCEE teachers throughout the school year. Depending upon the number of teachers using the DARCEE program, the coordinator's job might be a part-time position, or a full-time job, or might be handled by a regular counselor.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated in 49 classrooms at 4 sites during 1972-73. Black, white, Puerto Rican, and Indian children, in both kindergarten and day-care settings, have used the materials. The developers have not received any reports of harm associated with the use of this product. Materials were carefully scrutinized during the developmental stages and again at the conclusion of field testing to eliminate any form of social bias or inappropriateness of content.

Information gathered from the field test indicates that the materials can stand alone in the hands of a competent teacher with no aid beyond that given in the teacher's guide. Implementation will be enhanced, however, if a coordinator or adviser is able to provide teachers with continuing training and support in a preservice training session and throughout the school year.

Claims

Evaluation of the DARCEE field test showed that teachers who were trained in the DARCEE approach understood the program's features and implemented them faithfully and well. However, even the teachers who asked to read the materials on their own, without outside training, were able to implement most of the program essentials at a fairly high level.

Children in the program scored as high as or higher than students from other programs when measured by a standardized test of learning skills. An informal test of parental preference showed DARCEE was preferred 2 to 1 over two other well-known early childhood programs.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's guide	1	*	Reusable	
Sequence of objectives	1	1.55	Consumable yearly	
Trainer's guide	1	*	Reusable	
Rating form to assess classrooms	1	*	Reusable	
11 resource guides	1 set	1.75	Reusable	

*Price not determined

DEVELOPER/AUTHOR:

National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Demonstration & Research Center for Early Education (DARCEE)
George Peabody College
21st St. South
Nashville, Tenn. 37203

Thomas J. Johnson, Project Director, CEMREL
Paul Dokecki, Project Director, DARCEE

AVAILABILITY

The DARCEE program materials are complete and ready for dissemination, either through a potential publisher or by some other method. In the meantime, certain materials are being made available separately to teachers and other interested persons. (For costs, see the "Materials and Equipment" section of this résumé.) The DARCEE resource guides carry 1971-72 copyright dates. Titles include, "All About Me," "Plants," "Autumn," "Home & Family," "Winter," "Forest Animals," "Neighborhood & Community," "Farm Animals," "Spring," "Transportation," and "Farm Crops." *A Sequence of Cognitive Objectives* carries a 1972 copyright date. These materials are distributed by:

CEMREL, Inc.
3120 59th St.
St. Louis, Mo. 63139

RD 050 008

IMPROVING MOTOR-PERCEPTUAL SKILLS (IMPS)

A teacher's manual containing 34 activities for improving motor perception of children from ages 4 to 7

Improving Motor-Perceptual Skills (IMPS) is a teacher's manual containing 34 activities for the improvement of motor perception in kindergarten children.

Kindergarten and 1st-grade teachers often notice that a poorly coordinated child has learning problems. Recent research in the field of motor-perceptual development indicates: Effective learning demands skill in form perception, symbol recognition, visual-language development, and other motor-perceptual abilities; proficiency in these skills requires development of general coordination, balance, body image and position in space, eye-hand coordination, and control of eye movement; these motor-perceptual skills often are inadequately developed in children exhibiting learning problems; and helping children develop these skills can prevent or alleviate some learning difficulties.

The IMPS guide is designed to help teachers conduct activities which help develop these skills in kindergarten children.

The guide provides teachers with objectives and general purposes for each activity, lists of materials needed, suggested directions to children, and directions to teachers, with variations. Minimum acceptable performances for children are included.

Children understand expectations, observe and participate in activities, and practice skills in an enjoyable, noncompetitive situation.

Sample Lesson

Imitation of Movement

Objective: To imitate eight arm-and-leg movements produced by the teacher.
Look at me and do as I do.
Demonstrate the following movements. Hold each for an instant and return to position. Do not talk. Children are to copy what they see.

SUBJECT AREA(S)

The subject area is physical education (child physical development).

INTENDED USERS AND BENEFICIARIES

The intended users are children of early childhood, ages 4-7; the product is targeted specifically at kindergarten age children.

GOAL(S) OR PURPOSE(S)

The major goal is to assist children to improve physical development. Categories included are: (1) General coordination (march, jump, hop and skip, and step-slide and gallop); (2) balance (jump board and jump tire, walking board—forward); (3) body image (identification of body parts, imitation of movements, angels-in-the-snow, obstacle course—step 1, and everyday activities and sand table); and (4) eye-hand coordination (beanbag activities and rolling the ball).

PATTERNS OF USE

All 34 activities are suggested for use with kindergarten children during the first few weeks of school. However, the activities are listed according to organization rather than sequence of teaching. Teachers are encouraged to integrate activities from each of the various groupings, using them with increasing complexity throughout the year.

ASSESSMENT PROVISIONS

A complete motor-perceptual survey is provided in the guide for sequential testing five times a year. Each child's growth becomes evident by use of the periodic survey.

TIME REQUIREMENTS

Periods of 15 to 20 minutes daily are recommended for formal instruction. Additional activities should be permitted during free time.

IMPLEMENTATION PROCEDURES

Activities require music and a minimum amount of equipment. The guide includes directions for construction of a jump board, a walking board, a balance board, and a pegboard. Other equipment is suggested (e.g., barrels, large blocks).

MATERIALS AND EQUIPMENT

The teacher's guide is essential and not consumable—cost $3.50. Other materials would include lumber (e.g., for construction of boards)—a one-time cost of about $20. It is suggested that two or three parents construct the items as an evening project.

ASSURANCES AND CLAIMS

The materials have been examined for assurance of no psychological harm to children and cultural and social fairness. The materials, when used according to specifications, were found not to be harmful.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

Norman K. Hamilton, Director of Curriculum Development Programs Division

AVAILABILITY

Improving Motor-Perceptual Skills **(IMPS) was first published in September 1972 under public domain and has been reprinted several times since. It is currently available from the distributor:**

Continuing Education Publications
Extension Hall Annex
Corvallis, Oreg. 97331

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 009

LEARNING ACTIVITIES FOR USE BY CLASSROOM TEACHERS, COLLATED TO 58 DEVELOPMENTAL COMPETENCIES FOR PRESCHOOL CHILDREN (AGES 3-5 YEARS)

Learning activity cards to guide classroom activity selections for classroom teachers of children from ages 3 to 5

Classroom learning activities is an age-graded, activities approach to learning for the 3- to 5-year-old child who is in a center-based program, e.g., kindergarten, preschool, Head Start. Learning activities are provided for each of the 58 child competencies which span the developmental areas: Language-cognition, social-emotional, and perceptual-motor. The teacher has a card file which aids in selecting learning activities.

Each activity suggestion appears on a card that is filed under a particular competency to which it contributes. These assignments were made by following guidelines established through judgments of a panel of 34 expert early childhood practitioners. Individual activity cards are further assigned to developmental age levels (ages 3, 4, or 5 years) or, in some instances, comments on the cards identify how to make necessary age adaptations. Cards further identify resources or materials necessary to conduct the activity.

The card file format permits a ready selection of learning activities to correspond with the objectives of the teacher or program. Perhaps more importantly, activities can be selected to fit the individual learner's development level and individual learning program. A sufficient variety of activities is provided under each competency to appeal to children of differing backgrounds and interests, while permitting the child still to progress in the targetted areas of development. The 58-competency base undergirding these materials was established through an extensive empirical analysis of young children's development. (See Appalachia Educational Laboratory's *A Competency Base for Curriculum Development in Preschool Education.*)

The role of the classroom teacher is observing the children, recording behaviors, planning for areas in which children are ready to learn, and selecting activities from the file to interest and challenge children at their developmental ages in specific competency areas. The children learn by active participation in the activities themselves. The children's progress can be charted in terms of competencies.

SUBJECT AREA(S)

The subject area is a comprehensive set of learning activites for classroom use with 3- to 5-year-olds.

INTENDED USERS AND BENEFICIARIES

Classroom teachers of 3- to 5-year-old children are the intended users. The children are the beneficiaries.

GOAL(S) OR PURPOSE(S)

The goal is to support the preschool teacher's selection and use of learning activities which fit the learning characteristics and needs of the individual child.

PATTERNS OF USE

The learning activities are flexible enough to permit individualized planning for each child. The program follows a child developmental pattern within each competency area.

ASSESSMENT PROVISIONS

Assessment measures are not provided. Sample prototypic evaluation items are available for each competency, but the preparation of the complete child evaluation instrument was not funded during 1975. This work will be carried forward in 1976 if the National Institute of Education supports it.

IMPLEMENTATION PROCEDURES

Use of the product is predicated on the availability of a reasonably equipped preschool classroom and out-of-doors area.

MATERIALS AND EQUIPMENT

The price of the activities cards and a small accompanying booklet is not yet available, since development and production are still in progress.

ASSURANCES AND CLAIMS

No assurances and claims can be made at this time, since the materials have not yet been field tested. However, every precaution is being taken to insure against race or sex bias or harmfulness. They should be made available for selected experimental use during 1976 to complete determinations regarding assurances and claims.

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

Prototype sets will be completed during 1975. Production of sets for field testing awaits decisions from the National Institute of Education regarding program support during 1976.

For further information, contact:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 010

LEARNING ACTIVITIES FOR USE BY HOME VISITORS AND PARENTS, COLLATED TO 58 COMPETENCIES FOR PRESCHOOL CHILDREN (AGES 3-5 YEARS)

Learning activity cards to guide home visitors and parents of 3- to 5-year-olds in learning activities in the home

Learning Activities for Use by Home Visitors and Parents is an age-graded, activities approach to learning for the 3- to 5-year-old child who is in a home-based program of early childhood education. Learning activities are provided for each of the 58 child competencies which span the developmental areas: Language-cognition, social-emotional, and perceptual-motor. The home visitor has a card file which aids in selecting learning activities.

Each activity suggestion appears on a card that is filed under a particular competency to which it contributes. These assignments were made by following guidelines established through judgments of a panel of 34 expert early childhood practitioners. Individual activity cards are further assigned to developmental age levels (ages 3, 4, or 5 years) or, in some instances, comments on the cards identify how to make necessary age adaptations. Cards further identify home resources or materials necessary to conduct the activity. In some cases, materials will be locally supplied to parents through the home visitor.

The card file format permits a ready selection of learning activities to correspond with the objectives that are set for the individual child. The objectives will be determined by the child's level of development and activity interests. A sufficient variety of activities is provided under each competency to appeal to children of differing backgrounds and interests, while still permitting the child to progress in the targeted areas of development. The 58-competency base undergirding these materials was established through an extensive empirical analysis of young children's development (see AEL's *A Competency Base for Curriculum Development in Preschool Education*).

The role of the home visitor is observing the child, recording behavior, planning with a classroom teacher or other supervisor for areas in which the child is ready to learn, and selecting activities from the file to demonstrate to the parent or to leave with the parent to use with the child. The home visitor typically will visit the home or talk by phone once per week. The parent works with the child on a daily basis, using the learning activities. The child learns by active participation in the activities themselves. The child's progress can be charted in terms of the competencies.

SUBJECT AREA(S)

The subject area is a comprehensive set of learning activities for home use with 3- to 5-year-old children.

INTENDED USERS AND BENEFICIARIES

Home visitors and parents of 3- to 5-year-old children are the intended users. Children are the beneficiaries.

GOAL(S) OR PURPOSE(S)

The purpose of the product is to support the home visitor's selection and demonstration of learning activities and to aid parents in using these learning activities which fit the learning characteristics of the individual child.

PATTERNS OF USE

The learning activities are flexible enough to permit individualized planning for each child. The program follows a child developmental pattern within each competency area.

ASSESSMENT PROVISIONS

Not provided. Sample prototypical evaluation items are available for each competency. The preparation of the complete child evaluation instrument was not funded during 1975; this work will be carried forward in 1976 if funding is secured.

IMPLEMENTATION PROCEDURES

Use of the product is predicated on a school system's organizing itself to conduct a home visitor program.

MATERIALS AND EQUIPMENT

The price of the activities cards and a small accompanying booklet is not yet available, since development and production are still in progress.

ASSURANCES AND CLAIMS

No assurances and claims can be made at this time, since the materials have not yet been field tested. Every precaution is being taken to insure against sex or race bias or harmfulness. They should be made available for selected experimental use during 1976 to complete determinations regarding assurances and claims.

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

Prototype sets will be completed during 1975. Production of sets for field testing awaits decisions regarding program support during 1976.

For further information, contact:
Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 011

THE SELF-SCHEDULE SYSTEM

An instructional learning-management system to allow children to work on both structured and unstructured learning activities in one classroom setting

The *Self-Schedule System* is an instructional-learning management system designed to implement an instructional program which combines structured individualized learning activities with open-ended exploratory activities. Not only does it allow different children to work on structured and unstructured learning activities at the same time within one classroom, but it also fosters the development of the students' ability to interact with, manage, and control the learning environment. The system is designed with explicit steps to help the students take increasing responsibility for planning and carrying out their own learning activities with a minimum of supervision and direction from the teacher.

Under the *Self-Schedule System*, children pick up their prescribed assignments at the beginning of each activity session (either a 1-day or a 1/2-day) and understand that they must accomplish the prescribed tasks during the course of the session. They may, however, work on the tasks in any order they choose. Under this system, at any given time children can be found working in virtually every area of the classroom, with the teacher circulating among them. Small groups of children can be called together for group activities—for example, a group reading lesson—whenever the teacher wishes. Children can also form groups on their own for exploratory games or other activities. When the group session is over, children can return easily to their previously interrupted activities or to new ones.

The teacher's role involves guiding and providing proper environmental support for the student. These functions are critical to the successful operation of the system. The "how to" aspects of carrying out the teacher role are provided in a detailed teacher's manual.

SUBJECT AREA(S)

Since the *Self-Schedule System* is an instructional-learning management system, it does not include a curriculum, but rather is a means of implementing the various curriculum components in an integrated and complementary fashion in classroom settings. As the system is implemented, the student is provided with the opportunity to develop the competencies required to plan for, and to manage increasingly greater portions of, the classroom day.

INTENDED USERS AND BENEFICIARIES

The system is designed for use in classrooms implementing educational programs aimed at adapting to individual students. Although the system was designed for use with the *LRDC Early Learning Program*, its potential usefulness is not restricted to any grade level nor to any particular instructional model.

GOAL(S) OR PURPOSE(S)

The system is specifically designed to facilitate the achievement of the goals of the *LRDC Early Learning Program*. Specifically, it has as its aim to provide the student with opportunities: (1) To acquire and use the skills included in the various basic prescriptive and exploratory learning components in a variety of contexts which cut across formal curriculum boundaries, so that the student can learn to make connections, integrate the acquired competencies, and apply them in practical situations; (2) to experiment with a variety of learning activities and materials; (3) to gain firsthand experience in making individual decisions on the type of learning tasks to be worked on and in adopting the approaches to learning that seem most interesting and gratifying; (4) to experience success and failure in a variety of learning activities under varied learning situations; (5) to select, structure, and define the tasks in an individual way; (6) to evaluate learning outcomes with minimum assistance from the teacher; (7) to work with peers in developing cooperative plans to achieve a common goal; (8) to experience spontaneous interaction with peers and to acquire mastery of certain social skills necessary to adjust and adapt in the social environment; and (9) to acquire the independent and self-directed learning skills that are necessary to function in a classroom operating under an individualized instructional model.

PATTERNS OF USE

The system is implemented through a series of hierarchically arranged behavioral objectives. The arrangement of the behaviors in the hierarchy represents student behaviors requiring increasingly greater responsibility for planning daily classroom activities. Over a period of several weeks at the beginning of implementation, the student progresses through the hierarchy until the terminal behavioral objectives are achieved (i.e., the student can plan the order of doing prescriptive and exploratory tasks for 1 schoolday and complete all the assigned tasks within that schoolday or for longer time periods). Once the overall classroom pattern of use is established, it is self-sustaining.

It is important to note that, although this program was designed as one of the components of the *LRDC Early Learning Program* and it is strongly recommended that it be used in conjunction with its other components, the *Self-Schedule System* can be used independently.

ASSESSMENT PROVISIONS

Student progress through the hierarchy of management behaviors, specified in the design of the system, is assessed by the classroom teacher through both informal observation and the use of a systematic observational schedule. Students are assessed at each step in the hierarchy before the next step is introduced.

TIME REQUIREMENTS

Classrooms operating under the *LRDC Early Learning Program* have typically been able to establish the system within a 3- to 5-week period. In general, by the end of 3 weeks, students in the 1st and 2d grades have been able to acquire mastery of all the prerequisite steps necessary to function under the system (i.e., to be able to plan and manage their learning for a total schoolday).

IMPLEMENTATION PROCEDURES

No special equipment is required, nor are special organizational requirements necessary to implement this management system. The system has been successfully used with racially and ethnically heterogeneous student populations in both urban and suburban school districts and is suited to many different types of students.

Personnel Required for Product Adoption and Implementation

Implementation of this system ideally requires two adults in each class, a teacher and an aide. However, it can be easily adapted for use in classrooms with only one adult present. Detailed directions for use have been developed and are explicitly stated in the manual. Additional teacher training materials are under development.

ASSURANCES AND CLAIMS

Assurances

This system has been included as a component of the *LRDC Early Learning Program* for the past 3 years. Over this period of time, it has been field tested and used in classrooms of the LRDC developmental schools. No harmful effects have been reported by any of the teachers using the system during this time.

As an instructional-learning management system, this system does not, in itself, include any curriculums. It, therefore, does not contain any material which might potentially show bias in favor of a racial, religious, economic, or age group. Throughout the manual, both "he" and "she" are used instead of the generic "he."

It has been found, from field testing experiences, that this system can be replicated with minimal supervision. The manual contains detailed information and directions for use and is, thus, expected to be highly transportable.

Claims

Several studies have been conducted to evaluate the effectiveness of the system. In general, the data suggest that the system is effective in implementing a combined prescriptive-exploratory individualized instructional program in the early elementary grades and in developing students' ability to take increasing responsibility for school learning as well as their perceptions of self-responsibility for school learning and academic achievement.

The results from the studies consistently support the hypotheses that when students are given the opportunity to take responsibility for their learning, they can develop the ability and the perception of this self-responsibility; and when they are given the responsibility for what and how they learn in school, the students tend to complete more learning tasks in less time.

When compared with a more traditional instructional-learning management system in which all students work on the same activities at the same time under the direction of the teacher, this system has been found to be the more effective one. The system effectively solves the problem of student "waiting" time (i.e., time spent waiting for the teacher to check the student's work before the student goes on to the next lesson), increases the time teachers spend in instructional interactions with the students, and has a variety of positive effects on the behavior of the individual students.

RD 050 011

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's manual	1 per classroom	To be announced	Reusable	

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Margaret C. Wang, Project Director

AVAILABILITY

The *Self-Schedule System* is ready for publication, and a "Publisher's Alert" has been sent out. Copyright is pending. Prepublication materials for implementing this system are available from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 012

INFANT RATING SCALES FOR USE BY CAREGIVERS IN DAYCARE CENTERS

Eight numeric scaling instruments measuring the psychological characteristics and competencies of infants from 3 to 15 months

Infant Behavior Rating Scales are assessment tools for approximating the development of various infant characteristics and competencies. They were developed based on an assessment of approach-withdrawal, arousal, and pleasure-displeasure responses in infants from 3 to 15 months of age.

The program assesses responsiveness, arousal or activity level, exploratory behavior, and the infant's affective state for the day as a whole, as well as in selected situations. Some of the scales were adapted from procedures developed by Brazelton for assessing newborn behavior, which are already in use in some day nurseries. Procedures developed for implementing these scales have been found to be a good organizing principle for operationalizing individualized care of infants in day-care facilities.

There are eight scales, each with a numbered rating system. The caregiver observes the child, noting different responses on a data sheet and then plotting the data on the rating scale. The titles and content of the scales are listed below:

1. Irritability. This scale gives a summary impression of the infant's fussiness and irritable crying as observed during an observation session.
2. Self-quieting activity. This scale yields a measure of the infant's ability to quiet itself after a period of upset.
3. Social consoling. This scale measures the amount of social soothing required to quiet a distressed, crying, or whimpering infant.
4. Affectivity. This is a 9-point scale ranging from strong negative through neutral to strong positive responses.
5. Affective response to caregiver. This scale is for measurement of the infant's affective reaction to the caregivers.
6. Activity. This scale is for measurement of the infant's activity during the time the infant is awake, including the period just before sleep.
7. Responsivity. This scale reflects the magnitude of the infant's model response to stimuli in the environment.
8. Information-getting activities. This set of scales is for approximating the different components of the infant's typical way of interacting with both the inanimate and social environments.

SUBJECT AREA(S)

Early childhood development: Assessment of infant responses.

Scales for rating "temperamental" characteristics of infants, which can be used either to maintain quality care in a group or to assess individual development of a particular infant.

INTENDED USERS AND BENEFICIARIES

The scales are of value, not only for collecting research data on the behavior and development of infants in different day-care centers, but also in providing important information concerning development of individual infants in a particular program. This information is of practical use to caregivers in their efforts to meet the needs of particular infants; i.e., to individualize the care of infants in day-care facilities. In addition, the scales provide researchers with useful information for tracing major developmental changes in important characteristics of infants, in day-care environments during the 1st year of life.

GOAL(S) OR PURPOSE(S)

The scales are intended primarily to describe such "temperamental" characteristics as responsiveness, irritability, activity level, affective state, along with a number of attentive and motivational characteristics of the infants.

PATTERNS OF USE

The scales are designed to be used in any day-care facility by caregivers with varying degrees of formal background in child development. They are sequential and cumulative.

ASSESSMENT PROVISIONS

Generally speaking, it appears that caregivers with varying degrees of formal background in child development can use the scales successfully to provide useful information concerning the infant's behavior and development. The developer suggests some amount of training be given to caregivers.

TIME REQUIREMENTS

Caregivers usually use the rating scales daily to record observation about the infants. Although frequency of use has varied in several reliability checks, a smaller number of ratings per week was shown to reduce the reliability of the weekly average ratings.

IMPLEMENTATION PROCEDURES

Training of caregivers should begin with discussions of the scales and their purposes and follow through with periodic reliability checks, discussions, and retraining to build up and maintain the consistency with which the rating scales are utilized. Whether such an approach is feasible depends on the flexibility of the caregivers time schedules.

In general, rating scales applied by caregivers should be limited in number but applied frequently. The daily total of different rating scales and rating scale applications required of a caregiver should probably be no more than eight or nine. For the purposes of evaluation and research, these ratings should be made three to five times per week. To maintain interest and accuracy in these ratings, the caregivers should be involved in their construction, collection, and analysis. Feedback to the caregivers on the trends indicated by the ratings and their reliability is important.

The choice of particular ratings to be made is largely a function of the objectives of the center's program. The ratings should be selected to reflect the intended impact of the program within its defined objectives.

Some of the scales which are rather difficult for the caregivers to apply reliably while they are taking care of the infants may be satisfactorily applied by an observer.

MATERIALS AND EQUIPMENT

In addition to the required rating scales, data sheets, and plotting graphs, the developers suggest that at least two caregivers be responsible for a group of infants. Cost estimates are not available at this time.

ASSURANCES AND CLAIMS

The scales have been carefully developed. Previous studies have dealt with the theoretical and methodological issues involved in the assessment of important aspects of infant behavior. That there is a need to assess such aspects of infant behavior has been addressed in several different projects. No evidence exists which suggests that this project may be harmful or socially unfair.

The original set of scales has been in use for more than 2 years in the Cornell infant research program (as of 1974). During this time, some have required only minor revisions while others have undergone extensive modifications.

The scales have demonstrated adequate reliability to be of use in different situations. The choice of the particular rating scale obviously depends upon, and must be made in the context of, the needs and purpose of the investigator. Some ratings can be made adequately over a relatively long timespan such as 3 or 4 hours, while others are better suited for use in short-structured situations of 10-15 minutes. Many of the scales can be applied in both settings successfully.

RD 050 012

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Cornell Research Program in Early Development and Education
Cornell University
Ithaca, N.Y. 14850

Robert H. Poresky, Product Developer
Henry N. Ricciuti, Product Developer

AVAILABILITY

Infant Behavior Rating Scales are in finished stage. They are ready for dissemination and implementation on a large scale and for consideration by a publisher. The project carries a 1974 copyright. Multiple copies are not available at this time.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 013

KRISP—KANSAS REFLECTION-IMPULSIVITY SCALE FOR PRESCHOOLERS

A test instrument which identifies those learning styles of children from ages 3 to 5½ that may handicap later educational development

Some children are exceptionally impulsive when asked to respond; others are more deliberate and reflective in answering. *The Kansas Reflection-Impulsivity Scale for Preschoolers* (KRISP) can assess these opposing cognitive styles in preschool children by means of an individually administered test.

Developed initially as a research instrument, KRISP can be used by teachers of preschool and other child care specialists without formal training in tests and measurements, as well as by psychologists. There are 2 comparable forms for KRISP, each consisting of 5 practice items followed by 10 test items. The test items themselves are sets of pictures; the child must indicate which item in the set is the same as a sample on the facing page. The tester records the time required by the child to make a decision and whether the child's answer is correct.

The user's manual for KRISP contains background information and preliminary normative data on a sample of 307 children to whom KRISP was administered. The manual is written in nontechnical language and format.

SUBJECT AREA(S)

Cognitive style (or tempo) is conceptualized as a dimension along which individuals differ in their typical speed and accuracy of performing tasks on which speed and accuracy are negatively related. The match-to-sample task of KRISP has this property. Those who respond most rapidly tend to make the most errors, and those who respond most slowly tend to make the least errors. Reflection-impulsivity is an individual characteristic somewhere between an intellectual ability, such as might be measured by an intelligence or aptitude test, and a personality trait, such as might be measured on a personality inventory. KRISP is designed to provide the researcher with data on this reflection-impulsivity characteristic.

INTENDED USERS AND BENEFICIARIES

KRISP is intended for use by preschool teachers and other child care specialists without extensive formal training in mental tests and measurements, as well as by psychologists.

The ultimate beneficiaries are children with particular impulsive or reflective tendencies, diagnosis of which can help prevent future educational difficulties.

GOAL(S) OR PURPOSE(S)

KRISP is intended to be useful not to diagnose some permanent incapacity or hidden talent, but to give the user a confirmation or disconfirmation of what may appear rather obvious, namely that a particular child seems unusually impulsive or reflective as compared with peers.

Ideally, of course, one might hope that most children are neither reflective nor impulsive across the board. A better goal might be for a child to discriminate those tasks and settings requiring a reflective approach from those acquiring from a more impulsive style, and to adjust individual behavior accordingly. At the very least, the program hopes to develop in preschoolers a long-enough attention span for them to be able to comprehend and carry out simple instructions accurately, together with freedom of self-expression which permits them to use words, movement, musical sounds, and graphic materials with some fluency, if not artistry.

Thus, the long-term educational goals of KRISP are: (1) To make predictions of children's differential functional effectiveness in different types of tasks and (2) to help preserve the impulsive child's fluency and expressiveness, while enhancing that of the rather cautious, reflective child.

PATTERNS OF USE

The KRISP testing package is sequential in nature. It may be used on a one-time basis only, or administered on separate occasions (with fixed intervals) to provide more complete information on: (1) Trait stability over a year's time, (2) the best possible estimates of a child's "true" score, and (3) indicators of 1st- and 2d-year mean scores for each child. No significant changes in procedure are necessary if KRISP is to be used on a multiple-administration basis (several times over a 1- or 2-year span).

ASSESSMENT PROVISIONS

KRISP is designed to be administered to preschool children between the ages of 3 and 5-1/2. The tester records the child's responses on a scoresheet and then charts the result on a graph; both scoresheets and graphs for different age groups are included in the KRISP manual and the test book.

The final step involves forming a judgment as to whether the label for the graphic region into which a child falls is an appropriate label for the child in question. Considerable caution should be employed in making such judgments. Firm conclusions require consistent supporting data, such as observation of the child and parent reports, and should not be drawn from KRISP data alone. The KRISP manual provides sample interpretations of hypothetical test results as plotted on the trait graphs.

TIME REQUIREMENTS

No specified time requirement is advised. However, certain prompts or stimulus procedures are suggested; if the child gives a wrong answer, the tester repeats the example one or two more times as necessary. If a child fails to select the correct example after three tries, the next example is given.

IMPLEMENTATION PROCEDURES

KRISP is designed to be used by teachers and other child care specialists without extensive formal training in mental tests and measurements. To this end, both the test booklet and the manual provide clear, nontechnical instructions written in an easily readable language and format.

KRISP has been normed and prepared for wider, though still experimental, use. The developer suggests that while a larger number of cases should be tested for inclusion in subsequent norms, KRISP is useful in its present form. The present KRISP norms are based on a generally middle-class population and are otherwise unselected. It will probably prove necessary and desirable to replicate the interim analysis on a larger sample and to extend KRISP data analysis to include regional and international comparisons, as well as demographic contrasts not yet possible with the existing data. KRISP has also been used on a limited, experimental basis with children from "Special Populations" (trainables and educables). Only slight variations in administration procedures are required for use with these populations.

ASSURANCES AND CLAIMS

Assurances

No information exists to suggest that KRISP may be harmful or socially unfair.

Claims

KRISP scores are likely to predict certain habits of thinking in a variety of situations even though the particular demands of the task and situation will, of course, play an important role in how a child performs. Initial norms on the KRISP indicate that females make slightly, but significantly fewer, errors than males and are probably more stable over a 1-year interval. Males show a stronger negative relation between speed and accuracy, but otherwise there are not marked sex differences. The effects of age (cross-sectionally) and practice are readily seen in the form of error reduction, but not as a systematic change in the speed of responding.

Retardates of the same mental age as the norming population respond more impulsively than normals, but degree of retardation appears to make less difference than institutionalization. Home-living retardates appear to develop an especially rapid and error-prone style, while children living in institutions take longer and do better than their home-living peers.

The KRISP appears to be a reliable instrument. Its predicative value has not been adequately tested. KRISP scores at age 3 may not predict KRISP scores at age 4 for boys, but they do for girls. It is hoped that as enlarged norms become available, a clearer picture of its ultimate practical usefulness will emerge. In the interim, it appears to be a useful research instrument.

DEVELOPER/AUTHOR:

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(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

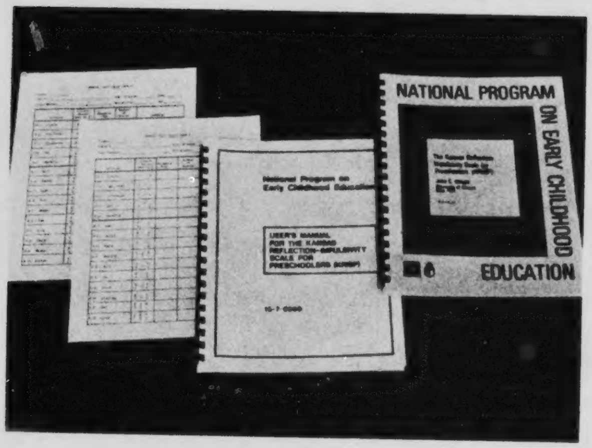
Kansas Center for Research in Early Childhood Education
University of Kansas
Lawrence, Kans.

John C. Wright, Product Developer

AVAILABILITY

KRISP carries a 1971 copyright. Copies are distributed by:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139


NATIONAL PROGRAM
ON EARLY CHILDHOOD
EDUCATION
National Program on
Early Childhood Education
USER'S MANUAL
FOR THE KANSAS
REFLECTION-IMPULSIVITY
SCALE FOR
PRESCHOOLERS (KRISP)

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 014

TEST FOR THE ASSESSMENT OF BASIC SKILLS (TABS) FORM A, FORM B

*An individually administered, domain-referenced
test to measure cognitive skills in children ages
4 and 5*

The *Test for the Assessment of Basic Skills* (TABS) is an individually administered, domain-referenced test designed to measure cognitive skills in 4- and 5-year-old children.

The content surveyed by TABS covers a wide range of preschool skills. However, primary emphasis is on selected skills relevant to the objectives of DARCEE preschool curriculum. DARCEE was developed at the Demonstration and Research Center for Early Education at George Peabody College under the leadership of Susan Gray. The curriculum emphasizes basic-to-learning skills such as colors, shapes, sizes; and visual skills; auditory skills; language development; and small-motor skills, as well as response methods (i.e., matching, recognizing, identifying, and producing).

Alternate forms of the TABS were developed to evaluate changes in cognitive and psychomotor skills of preschool children. Ideally, one form should be administered at the beginning of the school year, the other form at the conclusion of instruction. The test is administered individually in three 20-minute sessions with at least a 1-hour break between each session.

The test is constructed within a domain-referenced framework. The items chosen to assess each category (e.g., color, shape) are one selection of the curriculum content in that domain.

The test is broken down into five content domains: Basic concepts, visual skills, auditory skills, language development, and small-motor coordination. Each of these domains can be analyzed by subscores. The test can also be broken down into five response domains: Matching, recognition, identification, verbal production, and physical production; subscores can be obtained for each.

The test consists of a large spiral booklet and several manipulative materials. For most of the items, the tester asks the child to look at pictures on a page and to either point or respond verbally about what is on the page. The test questions are printed in the test booklet facing the tester. Children's responses are recorded on a separate record sheet. A few items involve manipulative tasks (e.g., tracing a design, cutting out a shape). Equipment for these tasks (e.g., pencil, scissors, needle and thread) must be supplied by the tester. Examiner's manuals are provided for both forms of the TABS. These manuals explain specifically how to conduct the testing sessions, and they give sample correct and incorrect answers.

The TABS (Form A and Form B) were used as primary assessment instruments during the trial installation of prototype DARCEE preschool curriculum and training materials (CEMREL, Inc., Field Test) in 49 classrooms during 1972-73. Prior to that time, TABS had been tested on a small number of children, and certain items were revised. As a result of analysis of data from the 1972-73 trial, it would be possible to further revise and refine the test and to complete the background report on the test's reliability and item validity. Funds for this project have not been available. The test exists presently as two finished forms plus the two examiner's manuals. Computer analysis of the results of testing, although partially completed, has not been compiled into a concise report form.

SUBJECT AREA(S)

Early childhood education: Cognitive measurement instrument

Cognitive skills are assessed in terms of subject matter domains and methods of response.

INTENDED USERS AND BENEFICIARIES

Although TABS is primarily focused on kindergarten (or 4- and 5-year-old) children, it has had limited usefulness with children as young as 3 years of age.

RD 050 014

GOAL(S) OR PURPOSE(S)

The goals of this product are to provide an objective test of the achievements and cognitive gains in children brought about by the DARCEE preschool curriculum as measured against its stated instructional objectives and (2) to devise a general-purpose test of preschool skills which include several response methodologies to assess achievement.

PATTERNS OF USE

Test for the Assessment of Basic Skills can be given at the beginning and end of a school year to assess children's achievement. TABS also can be used diagnostically to determine areas in which children need extra instruction. Any program wishing to assess the skills tested by TABS can find the test useful.

ASSESSMENT PROVISIONS

By scoring the TABS on optical mark scoring sheets, it is possible to analyze results quickly by computer, and to obtain subscores for each child for each content area and response method. This information can be obtained more laboriously by teachers themselves using the categorization of items by content domain and response method included in the user's manual. The complete user's manual for each form of TABS assures that testers will apply consistent standards and conditions in the test situation and will use the same criteria to score answers.

TIME REQUIREMENTS

The test is administered to each child in three 20-minute sessions, with at least a 1-hour break between each section. Normally, items 1-80 are completed during the first session; items 81-140, during the second session; and items 141-160 during a final session.

IMPLEMENTATION PROCEDURES

In the DARCEE Field Test, testers receive approximately 2 hours of training prior to administering the test. The training consists of reading the users manual and being introduced to the TABS by a trained DARCEE researcher. This training could be modified by having the tester read the examiner's manual. Enough testers are needed so that all children in a group are at approximately the same point in the instructional year. The test is normally administered in a quiet room, isolated from the regular classroom.

ASSURANCES AND CLAIMS

Assurances

The TABS has been used in a variety of urban and rural situations with white, black, Puerto Rican, and Indian children. The developers have not received any reports of harm associated with the use of this product. Test items have been carefully scrutinized for social or geographical bias, ethnic or sexual stereotyping, and inappropriateness of content. Analysis of the validity of test items has led to revision or deletion of items where necessary.

Claims

TABS was compared to the Boehm Test of Basic Concepts, a published instrument designed to measure concepts considered necessary for achievement in the first years of school, and to eight other commercially available tests. The purpose of the comparison was twofold: To assess the appropriateness of TABS to the DARCEE program's objectives and to determine the reliability and applicability of TABS as a general test for preschool audiences.

TABS was found to have very high overall test reliability and to be correlated highly with the Boehm Test ($r=0.71$). TABS covered all 29 separate areas of DARCEE objectives, which is more than twice as many as any other of the tests listed. In addition, TABS was shown to include a greater variety of subject matter areas and a much greater choice of response methodologies than the comparison tests. These features would seem to make the TABS test applicable to many preschool programs and its breadth of coverage unique among the preschool tests surveyed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Book of test items, form A	1 per tester	*	Reusable	
Book of test items, form B	1 per tester	*	Reusable	
Examiner's manual, form A	1 per tester	*	Reusable	
Examiner's manual, form B	1 per tester	*	Reusable	
Large needle and string, ball, scissors, primary pencil	1 each per tester			
Supplementary sheets	1 each per child		Consumable	
Tracing paper and blank paper	1 sheet per child		Consumable	

*Price not determined.

DEVELOPER/AUTHOR:

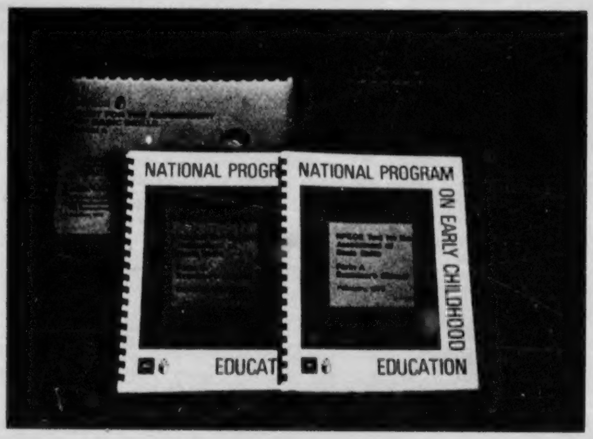
CEMREL, Inc. (Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Thomas J. Johnson, Project Director
Joseph F. Haenn, Product Developer
Warren Solomon, Product Developer

AVAILABILITY

This product exists in prepublication form only; no copies are available for distribution at this time. Prototypes are available from the developer:

CEMREL, Inc.
3120 59th St.
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 050 015

A COMPETENCY BASE FOR CURRICULUM DEVELOPMENT IN PRESCHOOL EDUCATION

A four-volume report defining child competencies and behavioral objectives for early childhood curriculum developers

A four-volume report comprises the competency base. These volumes report the research which defined the competency base (volumes I-III) and develop this into a comprehensive set of terminal behavioral objectives for the end of the preschool period, 72 months of age (volume IV). This does not yet represent a final product, but it is usable in its present form by early childhood curriculum developers who are concerned either with the design of the research or with the competency base itself.

The research was conducted using a national panel and an Appalachian panel of child development scholars. These panels judged the applicability of a set of general child developmental competency statements (goals) to children by age 72 months. They further judged specific behavioral examples of these competencies. More specific "performance statements" and "criterion statements" were developed for 32 developmental competencies on which the panels were essentially agreed as to their reasonableness and attainability. The criterion statements amount to behavioral tests of the competencies. The performance statements provide a level of description intermediate in specificity to the criterion statements and the competency statements. A final study asked a panel of more than 900 Appalachian parents to judge a parallel set of statements which were stated in more behavioral terms. There are some problems regarding the match of these statements to the 32 competencies. However, to the extent that the match has been found satisfactory, it is possible to conclude (within the limits of the direct questionnaire method employed) that Appalachian parents' expectancies of their own preschool children correspond to those of the two panels of child development scholars.

Further work, based on the original competency-based study, has sought to extend it via performance and criterion statements to an additional 26 early childhood competencies, using literature search rather than judgmental methods. A second extension has used the competency base to identify learning activities which might foster each competency at 3, 4, and 5 years of age. A further extension has been designed to answer the question of which competencies should receive greater emphasis at 3, 4, and 5 years of age. Age in all of the extensions of the original competency base has been used to mean developmental age rather than chronological age. These extensions will not be available for dissemination in the current year, except to qualified researchers. They should become available during 1976, completing the competency base as 58 early childhood competencies with performance and criterion statements (to determine whether they are present) and with learning activities appropriate to fostering children's progress in each competency area at their developmental ages. Curriculum developers and other early childhood practitioners will be the principal users of both the presently available and future products.

SUBJECT AREA(S)

The subject areas are early childhood education; specifically, child competencies and behavioral objectives.

INTENDED USERS AND BENEFICIARIES

Only curriculum developers can be expected to use the current product. Curriculum developers and other early childhood education practitioners will be able to use the final product.

GOAL(S) OR PURPOSE(S)

The product's purpose is the creation of an empirical competency base for curriculum development in early childhood education.

PATTERNS OF USE

Researchers will use volumes I-III. Curriculum developers will use volume IV primarily.

ASSESSMENT PROVISIONS

There are no assessment provisions.

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

Volumes I-IV have been accepted for entry into the ERIC Document System. Copies will be supplied in the interim at cost of reproduction and mailing. A small supply of the first stage of the learning activities study is available to researchers.

Provided that completion of the work is authorized by the National Institute of Education, the completed product will become available in 1976. For further information contact:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 016

A GOOD BEGINNING FOR BABIES: GUIDELINES FOR GROUP CARE

Guidelines for maintaining quality group care for infants during the 1st year of life

This manual presents the results of efforts to conceptualize more systematically and explicitly the essential features of a "quality" group-care environment for infants in the first year of life, in the form of a statement of principles, guidelines, and procedural suggestions.

The overall approach in formulating this statement has been to develop and maintain a quality group-care environment in a small experimental nursery and to test and refine these guidelines.

The major approach of this program is to try to make explicit for caregivers a set of guiding principles concerning infant care, with many concrete illustrations.

The guidelines include: (1) Statement of goals and principles, (2) importance of maintaining a close relationship between group-care programs and the families they serve, (3) organization of the program and staffing, (4) program content and operation, and (5) functional arrangement of physical facilities.

SUBJECT AREA(S)

Early childhood education

This manual discusses infant care during the first year of life and provides detailed consideration of sensitive caregiving practices likely to facilitate the development of infants' intellectual, social, and motor competencies.

INTENDED USERS AND BENEFICIARIES

The manual was written primarily for use by day care center program directors, those people in charge of maintaining program quality and training staffs. However, some parts of the manual will be useful if read and discussed by caregiving staffs.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To provide guidelines for creating and maintaining group-care environments for infants; (2) to emphasize that caring for infants in a group setting is an exciting, pleasurable, challenging, and complex job; (3) to make explicit for caregivers a set of guiding principles concerning infant care; and (4) to create an awareness that there are still many questions to be explored and answered concerning infant group care.

PATTERNS OF USE

The manual is intended to be of practical assistance primarily to those people most directly concerned with establishing and maintaining developmentally facilitating group-care environments for infants under 12 to 15 months of age, either in center- or family-based care settings.

ASSESSMENT PROVISIONS

There are no formal testing procedures for those who read this book, but seven checklists are provided for the caregivers to use in caring for and evaluating each child in their care. The checklists, called the Cornell Infant Rating Scales, are discussed in a product description entitled *Infant Rating Scales for Use by Caregivers in Day Care Centers.*

TIME REQUIREMENTS

A Good Beginning for Babies is resource material for program directors and caregiving staffs. It can provide a complete schema for implementing an infant care facility, or it can serve as a reference for an already-established program.

IMPLEMENTATION PROCEDURES

If one is to put into operation a program as described in *A Good Beginning for Babies*, there are a few things that need to be considered.

The training of staff is crucial to the success of the project. The training must be a continuing process, not an intensive series of workshops that happen at the beginning of a project or once a year. New caregivers should be hired for a trial period of apprenticeship which may last for several months. The number of staff members and the physical facilities will depend on each particular situation.

The manual should be seen not as a "how-to-do-it" book, but rather as a beginning point for creative caregiving.

ASSURANCES AND CLAIMS

Assurances

This material records the experience and procedures used at the Cornell Experimental Infant Nursery to provide high-quality developmental care for young children. Every effort has been made to insure that social or racial bias and ethnic and sexual stereotyping are not present in these materials. The experimental nursery was developed primarily to do research on babies under 14 months old. It was primarily a research laboratory for developing caregiving procedures and observational studies of very young infants. Therefore, no assurance can be made about the replicability of the procedures outlined in the report because they were not installed in situations outside the Cornell Nursery site.

Claims

No specific evaluation was conducted of the procedures used and recommended in *A Good Beginning for Babies*.

The guidelines, principles, and procedures suggested are based upon observation of caregivers by researchers at the Cornell Nursery. An accompanying technical report summarizes many of the findings which led to the suggested procedures.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
A Good Beginning for Babies (book)	1	Not available		

DEVELOPER/AUTHOR:

National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Cornell Research Program in Early Development and Education
Cornell University
Ithaca, N.Y. 14850

Anne Willis, Product Developer
Henry Ricciuti, Product Developer

A Good Beginning for Babies

AVAILABILITY

A Good Beginning for Babies is complete in prototype form. However, multiple copies are not presently available.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 017

INTRODUCTION TO EARLY CHILDHOOD EDUCATION (PART OF THE FLEXIBLE LEARNING SYSTEM)

A teaching manual that explains responsive education to teachers

This learner's unit is designed for coordinators of Far West Laboratory's Responsive Program (REP) and is part of the *Flexible Learning System.* It is intended to guide program advisers in helping teachers, teacher trainees, and administrators to become familiar with the goals and purposes of the REP.

More than any other unit in the *Flexible Learning System,* this is an explicit teaching manual. It contains theory, background information, and explanations as well as study discussion questions, learning-oriented activities, and numerous quizzes and pretests. In brief, this unit is intended to be a complete guide to teaching teachers—and other adults involved with early childhood education—how to teach young children through responsive education.

The unit details responsive education in terms of its objectives, procedures, rules, trainer role, and materials. It directs the program advisers in the most effective ways to communicate their understandings to adult learners. It holds that only by actively administering this unit can advisers become sufficiently familiar with the REP to work effectively within their capacity and it provides explicit instructions for the advisers' teaching preparations.

SUBJECT AREA(S)

Early childhood education.

INTENDED USERS AND BENEFICIARIES

The intended users of this unit are program advisers to the REP. Secondary users are the teachers, teaching assistants, and administrators who will take the course. The eventual beneficiaries of the unit are all these adults and the children whose education they supervise.

GOAL(S) OR PURPOSE(S)

To teach program administrators in the REP how to help other adults, who are involved with early childhood education, to learn goals and methods of the REP program.

PATTERNS OF USE

Cumulative and sequential, except that provision is made in the unit for learners to bypass material they already know and for which they can demonstrate their knowledge through pretests.

ASSESSMENT PROVISIONS

Numerous test questions and exercises are posed for the learner who is encouraged to answer them and compare responses with those suggested in the unit, in a self-evaluation format. Provision is made for outside evaluation by a qualified person from the Far West Laboratory for Educational Research and Development.

TIMF REQUIREMENTS

Time requirements vary from teacher to teacher.

Other specific materials are suggested to fit individual learning centers. The unit provides suggestions and alternatives and holds that no materials should be used in the learning centers which are not available or cannot be substituted in the real classroom. Suggestions include articles and pamphlets on the REP, filmstrips, cassette tapes, language master with notched cards, eight basic toys of the REP, and refreshments.

ASSURANCES AND CLAIMS

Field testing is continuing and will be completed by November 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	When worn	Not determined
AV equipment (35mm filmstrip)	1 per class	Not determined	When worn	Not determined
Projector audio cassette playback unit	1 per class	Not determined	When worn	Not determined
Screen (if no blank wall available)	1 per class	Not determined	When worn	Not determined
Multimedia kit (early childhood information unit)	1 per class	88.50	When worn	Educational Products Information Exchange Institute, 463 West St., New York, N.Y. 10014
Early Childhood Development (book)	1 copy per trainee	Not determined	When worn	Education Commission of the United States, 186 Lincoln Ave., Denver, Colo. 80203
Beyond Compensatory Education (book)	1 copy per trainee	1.85	When worn	Superintendent of Documents, Government Printing Office, Washington, D.C. 20402
"Criterion Responses"	1 copy per trainee		When worn	Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, Calif. 94103

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

AVAILABILITY

The product will be available November 1975 from:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 018

UNDERSTANDING AND ASSESSING THE INTELLECTUAL DEVELOPMENT OF YOUNG CHILDREN
(PART OF THE FLEXIBLE LEARNING PROGRAM)

Handbooks and video tapes to acquaint teachers of children from ages 4 to 8 with Piaget's theory of mental development

This unit is presently under development as part of the *Flexible Learning System.* It is intended to acquaint early childhood educators with Piaget's theory of mental development and provide instruction on the methods of assessing children's cognitive growth in four domains: Classification; order relations (e.g., seriation); quantitative relations (e.g., number concepts and measurement); and understanding of spatial relations.

The development of the units is founded on the underlying assumption that educators who are acquainted with developmental theory and the cognitive skills of their own children will be: (1) Better able to relate educational experiences to each child's level of development, (2) less likely to devote energy to teaching skills that are known to emerge through the natural progression of mental development, (3) more likely to adopt an educational perspective that values the child's active use of intellect, and (4) able to adopt an approach to child-assessment that focuses on the nature of the child's thinking rather than specific factual or skilled knowledge.

The unit will consist of four 30-minute color video tapes, each focusing on the theoretical and developmental aspects of four intellectual domains. Each film will be accompanied by a written handbook consisting of: (1) A theoretical understanding of the topic (e.g., classification) and its relation to mental development between 4 and 8 years of age (this paper will be closely tied to the film), (2) a description of methods and materials for assessing children's development in each area of cognitive growth, (3) a set of paper-and-pencil exercises to personalize the learner's understanding of the theory and practice and to provide feedback on the learner's understanding of the content, (4) a set of assessment activities designed to acquaint the learners with the intellectual development of the children they are working with, (5) a theoretical discussion of the implications of cognitive development for educational practice, and (6) an annotated bibliography providing references for future studies of the theory and practice.

SUBJECT AREA(S)

Subject areas include understanding and assessing the cognitive development of children between 4 and 8 years of age.

INTENDED USERS AND BENEFICIARIES

The intended users are all people who are working directly with children and early childhood educational settings.

GOAL(S) OR PURPOSE(S)

The major goal of this program is to provide early childhood educators with an understanding of Piaget's theory of intellectual development and the application of that theory to assessing children's growth.

PATTERNS OF USE

Each of the four video tapes and companion workbooks could be used independently and in a preferred sequence. However, a sequence is recommended, and the effects of the sequence should be cumulative.

ASSESSMENT PROVISIONS

Each handbook will contain a number of problems and knowledge questions. Answers will be provided. These questions will be used for self-assessment by students and/or as a vehicle for feedback to the trainer.

TIME REQUIREMENTS

Eight weeks of inclass instruction, or 16 hours, is required. Fieldwork and homework reading assignments will require an additional minimum of 8 hours.

IMPLEMENTATION PROCEDURES

The unit is intended to be used as part of inservice or preservice training, ideally in the context of an 8-week course in which a number of learners have the opportunity to discuss the materials and their field experiences.

The instructor should be familiar with early childhood education and should have some familiarity with Piaget's theory and the administration of Piagetian tasks.

Learners must have access to children in the 4- to 8-year-old range and, ideally, should have access to the children for the duration of the training.

ASSURANCES AND CLAIMS

Field testing will be completed by November 1975, at which time assurances and claims can be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide (4 handbooks)	1 copy per learner	Undetermined	When worn	Undetermined
4 video tapes	1 per course	Undetermined	When worn	Undetermined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Keith R. Alward, Senior Developer

AVAILABILITY

The program will be available November 1975.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 019

DEVELOPING CHILDREN'S CLASSIFICATION SKILLS (PART OF THE FLEXIBLE LEARNING SYSTEM)

A guide for teaching those working with preschool children about concept formation

Developing Children's Classification Skills is designed for use by teachers and teaching assistants of preschool-age children. The unit is intended to help teachers arrive at an understanding of "concept formation" in a way that will permit them to apply their understanding to their teaching situations and thereby help children develop their own abilities to recognize and comprehend "concepts."

Since concept teaching relies heavily on language, the guide urges extensive verbalization with children such as naming, describing, expressing, and explaining. In this way the child develops a meaningful vocabulary.

The guide is structured so that the teacher can learn much of the material at the teacher's own speed. A pretest section allows teachers to determine what their real needs are within this framework. Each subsection of the guide explains its intentions and approach and then allows the teacher-learners to apply what they have learned in the classroom situation. Following each specific learning experience, the guide provides a quiz to allow the learners to evaluate their preparedness to continue in the study.

SUBJECT AREA(S)

Class concept formation is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users of this guide are teachers and teaching assistants of preschool-age children.

GOAL(S) OR PURPOSE(S)

The goal of the guide is to teach people who work with preschool-age children about concept formation in such a way that they can apply their learning to their classroom situation and thereby help young children develop their own abilities and comprehend concepts.

PATTERNS OF USE

The guide gives the teacher-learner the freedom to bypass the sections that concern knowledge already in the teacher-learner's possession by providing a pretest section for self-evaluation. It also allows the learner to work at an individual speed. As a result, the use pattern is cumulative but is sequential only within the limits of the learner's own needs.

ASSESSMENT PROVISIONS

The guide contains a regular series of review questions which the learner answers for both self-evaluation and evaluation by an adviser or trainer in the course of study.

ASSURANCES AND CLAIMS

Field testing will be completed by November 1975.

RD 050 019

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's unit	1 copy per learner, 1 copy per instructor	Not determined	When worn	Not determined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Jean Monroe, Senior Developer

AVAILABILITY

The product is available February 1975 from:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 020

ENRICHING LITERATURE EXPERIENCES FOR YOUNG CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)

A two-volume unit to guide teachers in teaching literature creatively to children from ages 4 - 8

Enriching Literature Experiences for Young Children is a two-volume unit. The first volume is the learner's guide, designed for use by adults (hereinafter referred to as teachers) who teach or work with children approximately 4-8 years of age. The second volume, use of which presupposes familiarity and experience with the first volume, is designed to be used concurrently with volume 1, by instructors of teachers.

The purpose of volume 1 is to facilitate an experimental method of approaching, learning, and teaching children's literature in a creative manner and as a creative force. The ultimate aim is to expand children's imaginative and vicarious experiences in learning so that they develop positive self-concepts.

The purpose of volume 2 is to enable an instructor, who already understands the methods and intents of volume 1, to teach the approach to others who are involved with children.

This unit operates on the expressed theory that there is no single "right way" to teach children's literature; whatever method is used should engender maximum growth and creative expression in each individual student. It then sets up representative guidelines for understanding one particular way in which these expressed goals may be attained, stating repeatedly that the unit is not to be taken as strict policy, but that it is merely an exemplary model on the basis of which teachers may—indeed, should—evolve their own specific approaches. The unit recommends that teachers take into account such variables as: Who the teachers are and what their backgrounds are; who the students are and what their specific backgrounds are; and what the students' innate capacities are for approaching and dealing with literary experiences.

After an overview, volume 1 begins a teacher's own experiences with, and own attitudes toward, children's literature. The volume proceeds with methods for: Selecting and evaluating children's literature for classroom use; planning classroom reading sessions, encouraging active participation by children in reading, and thinking about and responding to literature; and evaluating and applying what the teachers have learned to their own experiences.

In brief, this product is directed toward education as a growth process through children's literature. Its intent is to educate teachers to maximize their capacities to teach and, subsequently, to educate children to maximize their own evolving capacities to think, grow, and develop a positive self-concept by experiencing literature.

SUBJECT AREA(S)

The subject area is children's literature.

INTENDED USERS AND BENEFICIARIES

The users are teachers and teaching assistants of children (ages 4-8).

GOAL(S) OR PURPOSE(S)

The goals of this guide are to educate teachers and teaching assistants to use children's literature as a means of fostering positive self-concepts and to encourage children to utilize their imaginative and cognitive abilities toward the end of maximizing their growth through a vicariously broadened experiential base.

PATTERNS OF USE

The product is sequential and cumulative.

ASSESSMENT PROVISIONS

Specific activities provide frequent opportunity for self-evaluations. Since this unit is designed for use in a group with an instructor, learner evaluation is an ongoing part of the instructor's activities.

TIME REQUIREMENTS

The time required is 8-10 weeks, or 24-30 hours. A 2-day training workshop is required of trainers.

ASSURANCES AND CLAIMS

Field testing of this unit has been conducted in Honolulu, Hawaii. Data are currently being analyzed. A field research study is also currently underway to investigate the effects of training on teacher performance in the classroom. Paper-and-pencil and observation instruments are used as indexes of teacher competence.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
1 booklet	1 per learner	Not determined	Reusable	
Teacher materials:				
1 instructor's booklet	1 per instructor	Not determined	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

JoEllyn Taylor, Senior Developer

AVAILABILITY

The product is still in a process of development. The distributor will be determined at a later date.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 021

DEVELOPING CHILDREN'S SENSE PERCEPTION (PART OF THE FLEXIBLE LEARNING SYSTEM)

A two-volume unit for teachers of children from grades pre-K to 3 to increase teachers' understanding of sense perception

This two-volume unit contains a learner's guide and an instructor's guide. The learner's guide is intended for teacher and teaching assistants of young children (preschoolers through 3d graders). It is designed to expand those teachers' understandings of sense perception expressly in order that they might better know how to encourage their students to utilize and maximize their own developing sense awarenesses as informational "take systems." The instructor's guide is intended for use by an instructor of such teachers and presupposes a familiarity with the learner's guide.

The unit operates on the theory that there is no single "right way" to teach the use of the senses; by paying attention to them and exercising them, it is possible to gain a clearer and more complete understanding of the world—whatever that may mean to any particular child or adult. The unit encourages teachers, working alone and in small groups, to practice sense perception in ways that will enable them to assist children in developing their own potentials with regard to their senses.

The unit details exercises for isolating one sense from the others as a method of learning by focus. For example, it teaches the learning of touch by sorting sandpaper according to grades of roughness without looking at the sandpaper.

The learner's guide provides 18 pages of overview for the learning teacher, followed by individual chapters on touch, smell and taste, hearing, and sight. Each sense-oriented chapter provides a section on objectives for the learner, an overall plan to approach learning and teaching the use of a particular sense, and a series of exercises and related learning and teaching devices. The unit is written in an easily accessible style and in such a way that the theory behind each progressive chapter can be used to understand, learn, and teach each succeeding chapter.

SUBJECT AREA(S)

The subject area is sense perception.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of preschoolers through 3d-grade students. The intended beneficiaries are both teachers and their students.

GOAL(S) OR PURPOSE(S)

The goal of this product is to teach teachers how to use and teach the use of the human senses.

PATTERNS OF USE

Theoretically, the content of the chapters which follow the introductory ones could be presented in any order. However, the unit is written in such a manner as to strongly encourage a progressive approach from the beginning to the end of the unit. Units are sequential insofar as they are cumulative.

ASSESSMENT PROVISIONS

Each chapter concludes with a checkup whereby the learners can test their understanding of the material most recently covered. Learner evaluation is also an ongoing part of the instructor's activities.

TIME REQUIREMENTS

The time required is 6-8 weeks or 18-24 hours. A 2-day training workshop is required of trainers.

ASSURANCES AND CLAIMS

A field-test study to determine the effect of training on teacher performance in the classroom is currently underway. The study will also examine the convergent validity of paper-and-pencil and performance measures as indexes of teacher competence.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	Reusable	
Instructor's guide	1 per instructor	Not determined	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Bethanie L. Gilbert, Developer
William F. Finzer, Developer

AVAILABILITY

This product will be available when its form is finalized and a distributor determined.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 022

HELPING CHILDREN DEVELOP HEALTHY SELF-CONCEPTS (PART OF THE FLEXIBLE LEARNING SYSTEM)

A learner's guide for teachers of children from grades pre-K to 3, discussing methods that can be used by a teacher to help promote healthy self-concepts in children

This unit is designed for teachers and teaching assistants of preschool to 3d-grade children (3- to 8-year-olds). The unit defines a self-concept as to what persons see about themselves and what persons feel about what they see. It defines a healthy perspective on a self-concept as seeing the facts about oneself "as they really are," liking the good points, and disliking but accepting the bad ones. It defines an unhealthy self-concept as exaggerating who the persons feel themselves to be, either by seeing themselves as superior or inferior to the reality.

The unit encourages teachers to give support and guidance to children who are still developing the most basic facets of their self-concepts. The author's research indicates that children with healthy self-concepts are more likely to learn and grow into adults "who can deal with everyday problems of living and not just with reading and mathematics," than children with unhealthy self-concepts.

The learner's guide suggests and discusses methods by which teachers can learn to provide the support and guidance children need in order to grow in such a manner. It provides suggestions for teaching practices directed toward this end, as well as for changing negative situations into positive ones. It also explains methods by which teachers can judge learning situations to ascertain the most fruitful approaches to encouraging healthy self-concepts among children.

In addition to the functional section of the guide, it also includes three appendixes, or "resource booklets." The resource booklets are intended to amplify both the philosophy behind the unit and the exercises and experiences it suggests. The resource booklets contain discussion guides, rewritten versions of formal examples from the main part of the unit, and articles relevant to understanding the idea of self-concept.

SUBJECT AREA(S)

The subject area is evolving self-concepts in young children.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of preschool and 3d-grade children. The intended beneficiaries are these adults and, subsequently, the children they teach.

GOAL(S) OR PURPOSE(S)

The goal of this unit is to instruct adults who deal with young children in educational systems in understanding the idea of "self-concept," the distinction between a healthy self-concept and an unhealthy one, how this distinction applies to young children whose self-concepts are still formative, and how to apply their understandings to help those children evolve healthy self-concepts.

PATTERNS OF USE

The product is cumulative and sequential except for the resource booklets which are used with specific sessions as indicated in the unit.

ASSESSMENT PROVISIONS

The learner's guide provides suggested answers to the questions it poses. The learners are encouraged to compare their responses with those suggested in the unit. The unit makes it explicit that answers need not agree but when they do not, the learners should understand how and why they disagree. The unit is structured so that it can be used alone, with a partner, or in a small group. If used with a partner or small group, comparison and discussion of answers to the unit's questions are encouraged.

TIME REQUIREMENTS

The time required is 1 to 1-1/2 hours for each of eight sessions (8-12 hours) over a period of 6 to 8 weeks. A 2-day training workshop is required of trainers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Natividad DeAnda, Senior Developer

AVAILABILITY

This product is not yet available. The distributor and price will be determined at a later date.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 023

OBSERVING AND EXTENDING CHILDREN'S PLAY ACTIVITIES (PART OF THE FLEXIBLE LEARNING SYSTEM)

A learner's guide for teachers of children from ages 4 to 8 focusing on the importance of play to a child's growth and development

Observing and Extending Children's Play Activities is intended for teachers and teaching assistants of children ages 4-8. It focuses on "the importance of play to a child's growth and development and the various roles a teacher may exhibit in relation to play."

The overriding philosophy of this unit is that children learn best when doing what they most want to do and that by observing how children play and with whom or what they choose to occupy their "free-play time," it is possible to extend play activities to include more complex learning processes.

The unit strives to instruct teachers on the importance of children's play by (1) using observations of children's behavior patterns during spontaneous play, (2) deciding when and how to add outside resources to enrich children's play experiences, (3) determining when and how to intervene to adapt the play situation to a concrete learning experience, and (4) structuring the classroom to focus play experiences on a specific idea or set of ideas.

The unit provides explanations of its major concepts and sets of activities through which the ideas can be studied, understood, and implemented.

SUBJECT AREA(S)

The subject area is children's play.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of children ages 4-8. The intended beneficiaries are those teachers and their students.

GOAL(S) OR PURPOSE(S)

The goal is to instruct teachers and teaching assistants of young children about the real meaning and benefits of children's spontaneous, self-determined activities.

PATTERNS OF USE

The use pattern is cumulative.

ASSESSMENT PROVISIONS

The guide provides specific activities which entail reviewing the concepts presented. Much of the learning process is observational, with embedded feedback mechanisms.

TIME REQUIREMENTS

Time required is 6-8 weeks or 12-16 hours of instruction with a 2-day training workshop for trainers.

ASSURANCES AND CLAIMS

Field testing of this unit is currently underway in Honolulu, Hawaii, and New York, New York.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 copy per learner	Not determined	When worn	Not determined
15-minute film	1 copy, each group of learners	Not determined	When worn	Not determined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Judy Brown, Senior Developer

AVAILABILITY

The product will be available November 1975 from:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 024

PROBLEM-SOLVING WITH YOUNG CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)

A two-volume unit to help adults working with children from ages 4 to 8 set up a problem-solving classroom setting

This two volume unit in the *Flexible Learning System* is designed to help adults who work with young children ages 4-8 to develop competencies needed to set up a problem-solving classroom climate. The unit is concerned with teaching such adults how to encourage independent problem solving among their students. For the purpose of the guides, problem solving is defined as: Identifying problems; executing a creative search for solutions; interacting with others and their problems in a manner which allows them to feel respected, valued, and understood; applying prospective solutions; and evaluating results.

The unit is intended for use by two or more persons in a group. The learner's guide is accompanied by the instructor's guide.

The learner's guide contains activities for learning the unit's skills, as well as explanations of the nature of specific kinds of problems, and analysis sheets for the learners to evaluate what is being taught, and to evaluate their own responses to the material. The learner's guide approaches educating teachers in much the same way it approaches having teachers educate children. Its philosophy is that knowledge which is meaningless in a learner's real-world context has little value to the learner and will soon be forgotten unless some meaningful connection can be drawn between the theoretical problem and the learner's experience. Therefore, part of the problem-solving approach utilized by this unit includes determining the realtiy of problems. Another part of it consists of making problems (and the search for solutions to them) relevant to the learner.

SUBJECT AREA(S)

The subject area is problem solving.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of children from preschool through 3d grade. The intended beneficiaries are both those teachers and their students.

GOAL(S) OR PURPOSE(S)

The goal of this product is to teach teachers and teaching assistants a creative approach to helping young children learn to recognize and solve problems.

PATTERNS OF USE

The unit is sequential and cumulative.

ASSESSMENT PROVISIONS

Each of the eight activities contained in the unit is accompanied by a learner's worksheet or group of such worksheets. Some of these worksheets provide effective posttests for the learner. Learner evaluation is also an ongoing part of the instructor's activities.

TIME REQUIREMENTS

The time required for this product is 20-24 hours or 8-10 weeks of instruction. A 2-day training workshop is required of trainers.

ASSURANCES AND CLAIMS

Field testing on this unit was conducted in Oakland, California and Milwaukee, Wisconsin. A total of 59 learners took part in the field test. The results showed significant pretest/posttest gains for learners.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	Reusable	
Instructor's guide	1 per instructor	Not determined	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Joanne Yinger, Senior Developer

AVAILABILITY

This product is not yet available to the general public.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 025

TEACHING CHILDREN TO INTEGRATE LANGUAGE EXPERIENCE (PART OF THE FLEXIBLE LEARNING SYSTEM)

A unit for teachers of grades pre-K to 3 to create a responsive language program for and with the children

This is a two-volume unit in the *Flexible Learning System.* The first volume is the learner's guide intended for use by teachers and teaching assistants of children from preschool age to grade 3. The second volume is the instructor's guide intended for use by the instructor of such teachers.

The intention of the unit is to enable teachers of young children to create a responsive language program for and with their students. The unit defines a responsive program as one in which the teacher makes use of children's own experiences in order to help them hear and understand what they are saying themselves, before burdening them with concepts beyond their grasp. In this regard, it encourages teachers to make use of children's sensual experiences, backgrounds, lifestyles, games, and languages. An important facet of the unit's philosophy is that teaching language in an integrated fashion means bridging the gap between what is already familiar and what is as yet unfamiliar to children.

The unit is structured in two parts. The first part pertains specifically to listening and teaches the learner to help young children relate to the language they themselves already create and speak. The second section, which presupposes familiarity with the first, concentrates on actually teaching language skills in an integrated fashion, utilizing fantasy, movement, and art with prereading, reading, writing and oral languages. Each of the two sections contains activities for the learner to perform both in and out of the classroom, and evaluation forms so that the learner may continually check personal progress through the course.

SUBJECT AREA(S)

The subject areas are language arts and teacher training.

INTENDED USERS AND BENEFICIARIES

The intended users of this guide are teachers and teaching assistants of children from preschool to 3d grade. The intended beneficiaries are these same teachers and their students.

GOAL(S) OR PURPOSE(S)

The purpose is to instruct teachers and teaching assistants of young children in a method of teaching language skills which will be meaningful to children because it is integrated into their own lives in ways they can perceive and comprehend.

PATTERNS OF USE

The activities are sequential and cumulative.

ASSESSMENT PROVISIONS

Since this is an activity-oriented unit, the results of each activity provide a measure of regular self-assessment which is both implicit and explicit. In addition, the unit contains assessment forms for use periodically throughout the series of activities. Finally, since this unit is to be used with an instructor, there are regular assessment exchanges between the instructor and the learner.

TIME REQUIREMENTS

Eight weeks, or 16 hours of instruction, plus a 2-day training workshop for trainers.

ASSURANCES AND CLAIMS

Field testing of this unit has been completed in Honolulu, Hawaii; data are currently being analyzed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	When worn	Not determined
Instructor's guide	1 per instructor	Not determined	When worn	Not determined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Margot Biestman, Senior Developer

AVAILABILITY

The product is not yet available for general distribution.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 026

USING TOYS AND GAMES WITH CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)

A two-volume unit to teach adults working with children from grades pre-K to 3 how to use toys and games to help children acquire cognitive skills and develop a healthy self-concept

This is a two-volume unit in the *Flexible Learning System.* The first volume is designed for use by teachers and teaching assistants of preschool through 3d-grade children. It is comprised of two sections. The first provides an overview of the unit and details the use of eight instructional toys. The second volume offers directions for the use of an additional nine toys with older children (5-6 years old). The second volume is designed for use by an instructor in this unit and presupposes a familiarity with the first volume. It contains philosophical and background material for the unit, including instructions for use by the instructor, such as where and how to obtain games used in the unit and how to conduct training sessions.

The purpose of this unit is to teach adults who work with young children how to use toys and games in order to help children acquire cognitive skills and develop a healthy self-concept. It is the unit's intention to teach this material by instructing the learners in the use of eight basic and nine supplementary toys and games. Each of the 17 toys and games includes several ways of teaching. All the toys and games are designed to encourage the children's awareness that learning is and can be a pleasurable experience. Furthermore, the toys and games are designed with self-corrective features to provide opportunity for discovery learning and immediate feedback.

SUBJECT AREA(S)

The subject area is development of positive self-concepts in young children.

INTENDED USERS AND BENEFICIARIES

The intended users of the unit are teachers and teaching assistants of children, preschoolers through 3d graders. The intended beneficiaries are those teachers and their students.

GOAL(S) OR PURPOSE(S)

The purpose of this unit is to teach adults who work with young children how to use toys and games with those children in ways that will maximize the children's learning and growth potentials.

PATTERNS OF USE

This product is sequential and cumulative.

ASSESSMENT PROVISIONS

Since the unit is activity oriented, there is ample opportunity for self-evaluation during the course of the learning activities. Additionally, the unit is designed to be used with an instructor; therefore, learner evaluation is a part of the instructor's ongoing activity.

TIME REQUIREMENTS

The time required is 1 hour each week outside the classroom and 20 minutes each day inside the classroom for a period of 16 weeks.

ASSURANCES AND CLAIMS

All toys are safe for children to play with; i.e., nontoxic paint, smooth corners. A field-testing report is available on request.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's unit	1 per learner	Not determined	When worn	
Instructor's unit	1 per instructor	Not determined	When worn	
Sound cans	1 game per classroom	Not determined	When worn	
Color lotto	3 games per classroom	Not determined	When worn	
Feely bag	2 games per classroom	Not determined	When worn	
Stacking squares	5 games per classroom	Not determined	When worn	
Table blocks	4 per classroom	Not determined	When worn	
Number puzzle	2 games per classroom	Not determined	When worn	
Color blocks	3 games per classroom	Not determined	When worn	
Flannel board	3 games per classroom	Not determined	When worn	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Glen Nimnicht and others

AVAILABILITY

This product will be available when the prototypes are finalized and a distributor selected.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 027

ARRANGING THE CLASSROOM FOR CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)

A teacher's guide which focuses on physical aspects of a learning environment for children from ages 3 - 8

Arranging the Classroom for Children has been developed for use by any adult who works in a classroom or by anyone concerned with arranging an environment for learning. Specifically, it has been developed primarily for teachers and teaching assistants of children aged 3-8 years.

The unit is designed to focus the attention of the learner on the physical aspects of a learning environment, with the aim of developing the most productive and efficient learning environment possible. The physical environment should respond to children's needs and interests.

The unit requires 25 hours of active participation on the part of the learner. It discusses six specific classroom areas (private, individual free work with seating, learning center with sitting surfaces, learning center without sitting surfaces, general classroom activity, and large-group free areas). The unit provides an imaginary case study of a classroom arrangement, offers variations in the six primary physical areas, discusses physical flexibility in the room, and offers plans for restructuring, moving, or otherwise adapting the classroom space for maximum environmental encouragement to learning.

The unit discusses classroom facilities and resources—such as storage areas, working and seating surfaces, the floor, raised platforms, enclosed areas, and room dividers. It also deals with size, function, boundaries, materials, and working facilities within the educational environment.

SUBJECT AREA(S)

The subject area is physical aspects of the learning environment.

INTENDED USERS AND BENEFICIARIES

The intended users of this guide are teaching assistants and teachers of children aged 3-8.

GOAL(S) OR PURPOSE(S)

The purpose of this guide is to make the intended users aware of the functions and possibilities of the physical environment and become proficient in restructuring that environment to maximize learning.

PATTERNS OF USE

The topics in this guide are sequential and cumulative, with exceptions explicitly made for learners who are already familiar with the author's concepts. A pretest section allows the learner to determine needs with regard to use of the entire unit.

ASSESSMENT PROVISIONS

The unit provides constant self-testing for the learner. If the unit is used in a group with an instructor, learner evaluation is an ongoing part of the instructor's activities. With or without an instructor, however, the pretest, activity-oriented self-tests, and posttest provide ample opportunity for thorough and accurate assessment.

TIME REQUIREMENTS

The time required to complete the unit is 20-25 hours or 8-10 weeks of instruction, with a 2-day training workshop for trainers.

ASSURANCES AND CLAIMS

The unit was tested in Oakland, California, with 33 learners. Significant knowledge gains were obtained with a pretest/posttest design. A field study to determine the performance adequacy and the relationship of paper-and-pencil and performance scores is currently being conducted.

RD 050 027

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 copy per learner	Undetermined	When worn	Undetermined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Keith R. Alward, Senior Developer

AVAILABILITY

Available November 1975 from:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 028

MANAGING THE PRESCHOOL CLASSROOM (PART OF THE FLEXIBLE LEARNING SYSTEM)

A learner's and instructor's guide to teach teachers of preschool children how to better manage and organize the classroom

Managing The Preschool Classroom consists of a learner's guide and an instructor's guide. They are designed to teach teachers of preschool children how to better organize and manage their classroom.

For the purposes of the unit, "classroom management means that events in a learning situation are supervised and sequenced in some systematic way." Classroom management encompasses organizing: The physical classroom, time and activities, and people—both children and participating adults, such as teacher aides. The expressed philosophy underlying the unit's approach to classroom management is that it is crucial that the teacher know who students are and what their individual and group needs are, in order to most effectively manage a classroom toward maximizing its educational potential.

The unit urges that standards be established and maintained for appropriate behavior within the classroom. It also discusses "management approaches that can minimize behavior in the classroom." The guide further suggests methods by which classroom management can be planned to accommodate the particular needs of a specific class, classroom, and/or teacher.

As with other components of the *Flexible Learning System*, this unit operates on the principle that educational potential will be maximized when the structure is most conducive to learning; the structure which is most conducive to learning is that which flows most naturally within the scope of young children's natural inclinations and behavior patterns.

SUBJECT AREA(S)

The subject area is classroom management.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of preschool children. The intended beneficiaries are both these adults and their students.

GOAL(S) OR PURPOSE(S)

To help teachers and teaching assistants of young children understand the educational potential of proper management of space, time, activities and people within the classroom.

PATTERNS OF USE

Sections are cumulative and sequential.

ASSESSMENT PROVISIONS

The unit is accompanied by frequent guides which enable the teacher to gage comprehension of the course and progress within it. Some of the activity guides require active participation and others require simple observation. If the unit is used by a single learner alone, a "Hints and Answers" section is available for self-check. If the unit is used in a group with an instructor, learner evaluation is included in the instructor's guide.

TIME REQUIREMENTS

Approximately 8 weeks of training or 16 instructional hours. Trainers can be trained in a 2-day training workshop.

ASSURANCES AND CLAIMS

Field test data are currently being analyzed. The testing was conducted in Honolulu, Hawaii and in New York, N.Y.

RD 050 028

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 copy per learner	Undetermined	When worn	Undetermined
Instructor's guide	1 copy per trainer	Undetermined	When worn	Undetermined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Judy Brown, Senior Developer

AVAILABILITY

The product is available June 1975 at a cost of $4.95 from the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 029

COMMUNICATING WITH PARENTS (PART OF THE FLEXIBLE LEARNING SYSTEM)

A learner's guide to help improve communications between parents and teaching staff at all grade levels

This unit is intended for teachers, teaching assistants, and educators who work with children and parents. Unlike other units in the *Flexible Learning System,* however, it is not limited to early childhood staff, but can be used by staff at all grade levels.

The learning experiences in this unit will provide the learner with skills to identify desirable ways to communicate with parents; skills to determine parent views and alternative ways to assist their children's education; and skills to survey, plan, and implement programs to achieve better parent and school staff cooperation.

The unit provides the learner with the following opportunities: To obtain knowledge of the communication process, and the interpersonal and cultural factors affecting its operations; to clarify personal goals and contract for changes; to learn which factors contribute to problems in communication; to build new skills in listening and self-expression; and to develop and expand those skills already developed. Learners are given an opportunity to integrate new and old skills as a means of achieving their own goals of more effective communication.

SUBJECT AREA(S)

The subject area is improving communications between teachers and parents.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers, teacher assistants, principals, and other educators who work with children and parents. The intended beneficiaries are educators, parents and students.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to assist teachers in acquiring skills: (1) To identify how they communicate with parents and how they can communicate more effectively, (2) to explore different roles for parents in the education of their children, and (3) to develop and put into practice ways of expanding their roles.

PATTERNS OF USE

The unit is designed to be used in a series of 10 sequential workshops, providing an opportunity to build upon skills the learner brings to the experience and to practice new skills in workshops, family, and work settings. Each workshop will focus on a central theme.

ASSESSMENT PROVISIONS

The unit is structured on the basis of learner activity through group interaction, peer learning and teaching, content-embedded self-assessments, and self-rating of attitudes throughout the unit; it also has an assessment for the instructor.

TIME REQUIREMENTS

The time required for completion is 12-15 weeks of instruction or 15-30 hours; a 2-1/2-day training workshop is required of trainers.

ASSURANCES AND CLAIMS

Field testing is to be completed by November 1975, at which time assurances and claims can be made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 copy per learner	Not determined		Not determined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Angela B. Garcia, Developer

AVAILABILITY

The product will be available November 1975 from:
Far West Laboratory for Education Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 030

MANUAL FOR OPERATING AN INFANT CARE CENTER

Six guides for the operation of day-care centers for infants from 3 weeks to 14 months

Efficient procedures for running and maintaining quality care in an infant day-care center were developed by CEMREL and the University of Kansas. This work was designed to establish infant-care practices so that the staff can handle duties efficiently and provide a safe and healthful environment, engineered to stimulate normal child development. Research was conducted in a center having been designed for up to 20 infants from 3 weeks to 14 months old. Space within the center was assigned according to function, with one staff member assigned to each space. Thus, the model center had three staff members plus a supervisor. The staff members rotated functions during the day, but at all times one person was responsible for each of the three main areas: Feeding, play, and diapering.

Six "how-to-do-it" manuals aimed at prospective day-care operators record the procedures developed at the center. The manuals include: Diapering, feeding, receiving/departing, sleep, play, and the supervisor's responsibilities. The first four manuals are completed and ready for print. The play manual has a complete text and layout, but photographs must be supplied and the text must be set in type. The supervisor's responsibilities manual is a final draft which must be revised.

Each manual includes advice about specific procedures, recommended toys and materials, facilities designs, recordkeeping suggestions, and checklists to provide self-evaluation and to maintain high quality care.

SUBJECT AREA(S)

Early childhood education: Infant group care.

INTENDED USERS AND BENEFICIARIES

Operators and potential operators of centers for group infant care.

GOAL(S) OR PURPOSE(S)

The major goal is to provide a series of reliable, efficient, and high quality technologies to care for infants in a group-care setting.

PATTERNS OF USE

The infant-care manuals are a self-contained training program to introduce both naive and experienced caregivers to efficient routines for operating an infant-care center. The manuals may be read in any order. The supervisor of a center would probably determine how and when they would be used.

ASSESSMENT PROVISIONS

Each manual includes a checklist for staff members to complete about that area of the center. These checklists insure that the quality of care in each area is being maintained and that routines are faithfully carried out. In addition, the center supervisor carries out periodic checks of the operation of the center and reports findings back to the staff to improve and maintain quality care.

TIME REQUIREMENTS

The six manuals, five aimed primarily at caregivers and a sixth focused on the supervisor's responsibilities, can each be read in 1/2 hour. The developers suggest that the supervisor ask caregivers to read a manual and to go to the appropriate area of the center and apply the routines with another staff member. Then, the caregiver works through the routines alone while the supervisor or another staff member checks the performance. The caregiver may then refer to the checklist and the manual again, if necessary. This procedure is repeated for each manual. The entire training might take 1 to 2 hours per day for 5 days.

IMPLEMENTATION PROCEDURES

No special equipment, materials, or personnel are needed to make use of the manuals; all that is necessary is an operating infant-care center arranged spatially according to feeding, diapering, and sleep/play areas.

ASSURANCES AND CLAIMS

The manuals were tested with both experienced and naive caregivers in actual day-care situations. After reading the manuals, naive caregivers were able to perform the routines with 90 percent accuracy within five tries. Repeated observations of the experimental nursery, where the care routines were in use, showed that a consistently high level of care was maintained and the recommended routines were carried out faithfully over a period of months.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
6 manuals: Diapering Feeding Receiving/departing Sleep Play The supervisor's responsibilities	1 of each	Price not determined		

DEVELOPER/AUTHOR:

National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139
with
Kansas Center for Research in Early Childhood Education
University of Kansas
Lawrence, Kans.

Todd Risley, Project Director
Michael Cataldo, Product Developer

AVAILABILITY

Manuals exist in prepublication form only; no copies are available for distribution at this time.

RECEIVING/
DEPARTING
SLEEP
DIAPERING
FEEDING

INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 050 031

MULTIMEDIA TRAINING PACKAGE FOR PARAPROFESSIONAL TEACHERS "SETTING THE SCENE FOR GOOD CLASSROOM BEHAVIOR"

Multimedia training package for helping paraprofessionals who work with preschool children learn basic principles of classroom arrangement and maintenance

Setting the Scene for Good Classroom Behavior is a multimedia training package for paraprofessional teachers, particularly those who have little or no formal training, of preschool children. Designed for a leader, an observer, and 15 participants, the package is used in 5 sessions of approximately 1-1/2 hours each.

The package includes: (1) A leader's manual; (2) detailed session procedures; and (3) a variety of media products—video tapes, filmstrips, films, transparencies, and take-home pamphlets. Each session procedure is designed with an introduction, a straightforward presentation of concepts, group participation activities, and a summary.

The leader's manual includes specific instructions on techniques of group leadership, directions for increasing participation through a variety of techniques such as role playing, simulation, and group discussion, as well as an overview of the training session.

The sessions present basic principles of classroom arrangement and maintenance which will help reduce children's behavior problems. Participants learn how to adapt furniture to meet the needs of young children, how to display materials, and how to arrange space for classroom activities in ways that will promote children's independence while encouraging good classroom behavior.

Each session procedure contains detailed information on how to present the particular concepts included. After a statement of the purpose and focus of the session, these areas are discussed: Introduction, review (if appropriate), overview of media presentation, presentation, discussion, group participation activities, summary, and evaluation. Sample dialog is included when appropriate.

The results of a 4-month context analysis study in January 1973, which included interviews with teacher trainers and nationally recognized experts, a literature search, and conferences with representatives of regional and State agencies, revealed that, although there are many early childhood curriculum programs and materials, the majority are designed for children rather than for adults who interact with children. Further, few materials are available for training of the paraprofessional or assistant teacher or the teacher without a baccalaureate degree. The need for alternative presentation modes, utilizing modern media technology, and placing minimal reliance upon printed material was also identified.

Few, if any materials are organized in modular form or discrete packages which can be presented independently, or are presented in multimedia format so that the adult learner can succeed with only minimal reading skills.

Each Teacher Training Package (*Setting the Scene for Good Classroom Behavior* is the first of three packages to be developed) addresses a major area of basic skill related to maximizing the learning of young children. The Teacher Training Packages use video tape, filmstrips, and other communication media to present the basic information, especially the more complex aspects of the processes involved which are relatively easy to show but more difficult to explain verbally. In addition, short, printed materials are provided for each participant for the purposes of reinforcement and review.

This package is a multimedia approach developed in response to the assessed need for information on basic caregiver skills, with minimal reliance upon printed materials and/or direct lecture. The topic was selected as important for low-income paraprofessional teachers of preschool children by two advisory groups, one comprised of professionals in the field of early childhood education and the other composed of low-income teachers of various ethnic groups, and through a survey of paraprofessionals.

The instructional principles of developing awareness, knowledge, or comprehension, succeeded by application, have been followed. A variety of teaching strategies is described in the Leader's Manual and is also built into each session procedure. These strategies include large- and small-group discussion, simulation activities, role play, problem-solving situations, games, and evaluation, as well as direct presentation of information.

The group leader secures a meeting room and necessary equipment, operates audiovisual equipment, leads the sessions, and distributes and collects evaluation forms. Participants watch media presentations, participate in large- and small-group discussions, role play, and problem-solving activities. Take-home pamphlets which reinforce concepts presented in the sessions are provided.

SUBJECT AREA(S)

The module includes the following subject areas: (1) How inappropriate arrangement and maintenance frequently result in behavior problems, (2) how children feel when the classroom environment is inappropriate, (3) how to change or adapt existing facilities to meet the needs of children, and (4) how to select and display classroom materials.

INTENDED USERS AND BENEFICIARIES

The intended users of this module are paraprofessional teachers of young children and teachers who have had limited formal training in preschool education.

GOAL(S) OR PURPOSE(S)

The goals of this module are to help the participants: (1) To recognize the relation between room arrangement and management and classroom behavior problems; (2) to recognize physical settings that do and do not meet the needs of children; (3) to know which factors to consider in arranging space for various kinds of activities; (4) to know how to select, display, and determine the quantity of manipulative materials to minimize behavior problems; and (5) to understand their role in establishing rules for use of classroom materials.

PATTERNS OF USE

Sessions are sequential and cumulative. They may be used as part of inservice or preservice training programs.

ASSESSMENT PROVISIONS

Tests of participant knowledge of module content are provided for use at the beginning of the package and following completion of the package. In addition, criterion-referenced tests of content for each session are provided.

TIME REQUIREMENTS

The package consists of five sessions, each approximately 1-1/2 hours long.

IMPLEMENTATION PROCEDURES

Audiovisual equipment is required. No specific previous training is required, but a 1-day training session for leaders is recommended.

ASSURANCES AND CLAIMS

Assurances

No reports of harm have been received at this time. Additional data will be collected during pilot and field testing.

No complaints of ethnic or sex-role bias have been received at this time. Additional data will be collected during pilot and field testing.

Claims

The Southwest Educational Development Laboratory has evolved a systematic process for the development of educational products. This product development incorporates the entire gamut of activities in the formulation, development, testing, and evaluation of an educational product so that quality is assured.

Products are cycled through design test, after which materials are revised on the basis of feedback from the target population, leaders, and observers; then through pilot test, and are revised on the basis of feedback; and finally, through field test, after which a final revision based on field data is made.

The multimedia training package for paraprofessionals is being cycled through the laboratory's developmental process and is currently in pilot test.

RD 050 031

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Leader's manual	1 per package	Not determined	Reusable	—
Content outline	1 per package	Not determined	Reusable	
Session procedures (includes filmstrips, films, slides, transparencies, audiotapes, brochures, role-playing cards, and game cards)	1 per package	Not determined	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Joyce Evans, Acting Program Director
Joyce Coleman, Component Coordinator

AVAILABILITY

Setting the Scene for Good Classroom Behavior is presently in prepublication form only. No copies are available for distribution at this time. Development of two additional modules beginning summer 1975 is anticipated.

INFORMATION CURRENT AS OF MARCH 1975 ■

431

RD 050 032

PROCEDURES FOR THE DAILY OPENING AND CLOSING OF A DAY CARE CENTER

A checklist for monitoring the daily opening and closing routines of day care centers

This product consists of a kit of materials which serves as a checklist for the opening and closing routines for a day care center. It focuses attention on two periods of the day when the children are not present in the center—in the morning before they arrive and in the evening after they leave.

The manual provides a list of relatively simple items that should be checked each night and another list of things to be checked in the morning. Its primary concerns are convenience and safety—to help the day care worker avert problems that might arise from oversight or neglect and to be sure that potential accidents are not encountered by the children.

The manual explains how to use the items provided in the kit. There is a very thorough explanation of the checklists since they serve as the most important elements in the kit. When to use the "Safety Alert" notices is also explained.

SUBJECT AREA(S)

Early childhood education: Center maintenance

This kit provides a simple routine for preventing oversights which could result in accidents or inconveniences within a day care center.

INTENDED USERS AND BENEFICIARIES

Any person who is responsible for a day care center could make use of this kit. The materials in this package have been designed to be used by trainees directly, without the assistance of an instructor.

GOAL(S) OR PURPOSE(S)

The primary purpose of the kit is to provide materials and procedures which will enable its user to monitor the daily opening and closing of a day care center.

PATTERNS OF USE

The checklist provided in the kit is adapted to fit the individual center in which it is to be used, and is used each morning and evening by the designated personnel to check the premises of the center. If it is found that one of the patrolled areas has a problem that needs attention by a staff member other than the checklist monitor, a "Safety Alert" sign is posted. This indicates the problem, such as a leaky faucet, and remains posted until the maintenance staff member can fix it.

ASSESSMENT PROVISIONS

There is no formal testing to measure the success of the kit. The kit itself is a type of "testing" or "checking device." Its success will be measured in the following ways: (1) How well it does prevent accidents and inconveniences; (2) if more than one center is being supervised by the same person, to what degree of uniformity it helps maintain; (3) how well it helps to spot problems, such as improper maintenance, before they begin to get serious; and (4) how well it serves as a record of safety and maintenance which can be kept on hand to show state licensing agents, building owners, or parents.

TIME REQUIREMENTS

The materials require about 1 hour to read. About 30 minutes is needed to adapt the materials to a given center. The daily monitoring and bookkeeping procedures require about 5 minutes each day.

IMPLEMENTATION PROCEDURES

No special training is needed in order to make use of this product. It is advisable, however, that the person monitoring the checklist be acquainted with the day care facility that is to be checked.

ASSURANCES AND CLAIMS

The developer has not received any reports of harm associated with the use of this product. The checklist was tested in an experimental version at the step-by-step preschool in St. Louis, Missouri. At that site, it was found able to stand alone in the hands of a competent teacher and able to be successfully implemented. Social bias and ethnic or sexual stereotyping are not strictly applicable to the content of the kit; however, the developer has made every effort to be fair in the presentation of all materials.

RD 050 032

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Kit containing: *Procedures for the Daily Opening and Closing of a Center* (book) 12 checklists (side 1: Morning checklist; side 2: Afternoon and weekly checklists) Blank checklists Safety alert notices	1 kit per day care center	Not available		

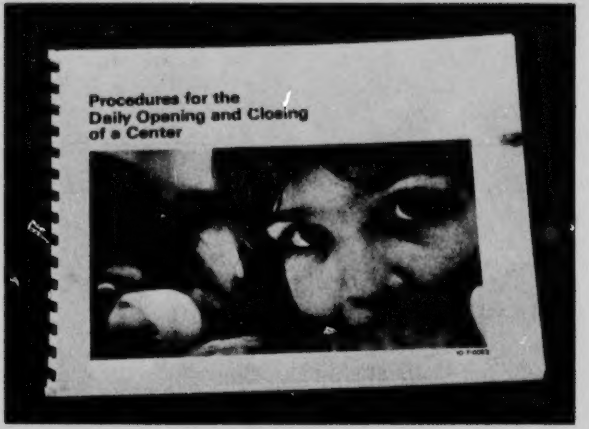
DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Edwin C. Myers, Product Developer
Pamela S. Comeaux, Product Developer

AVAILABILITY

Procedures for the Daily Opening and Closing of a Day Care Center was copyrighted in 1972. It is complete in prototype form, but multiple copies are not currently available.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 033

SCHOOL BEFORE SIX: A DIAGNOSTIC APPROACH

A comprehensive manual of diagnostic procedures and activities for preschool children

School Before Six: A Diagnostic Approach, revised edition, is a comprehensive manual of diagnostic procedures and activities for preschool children. It was developed after several years of research and testing by the Cornell Research Program in Early Childhood Education. The diagnostic approach proceeds from the notion that teachers should carefully observe each child's strengths and abilities and gradually provide activities that will refine skills and extend experiences. No specific teaching style is prescribed. Teachers are encouraged to adopt a flexible teaching style compatible with their own personality and taste. However, teachers should have a simple way to look at children and to record their strengths and weaknesses. The diagnostic approach provides this method in the form of anecdotal records, diagnostic activities, and suggestions for initiating and strengthening skills.

School Before Six is printed in two volumes. Volume I includes procedures for assessing young children's learning needs and strengths through testing procedures in four developmental areas: Large, small, and perceptual motor skills; language; social-emotional skills; and conceptual skills. General teaching strategies and activities are suggested to help children develop in each of these areas. Volume II includes a wealth of activities in areas such as science, art, table games, food preparation, language, social science, and music. Volume I is extensively cross-referenced to volume II to make the selection of appropriate activities for specifically diagnosed situations easy.

SUBJECT AREA(S)

The subject area is early childhood education related to diagnosis and teaching of motor skills, language arts, social-emotional skills, and other cognitive skills.

The manual provides techniques of planning for the individual child and for the group; explains how to diagnose and test children in individual situations and tells how to be an effective teacher.

INTENDED USERS AND BENEFICIARIES

Teachers of preschool children and instructors in teacher training institutions are the intended users. *School Before Six* could be used effectively in day care centers, nursery schools, and kindergarten classes.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To help nursery school and kindergarten teachers carry out the difficult task of giving each child the kind of school experience which is personally needed, (2) to help each child grow in all areas using the child's own strengths and interests to aid learning, and (3) to help teachers plan a program that meets the child's needs and at the same time takes into account the teacher's own way of doing things.

PATTERNS OF USE

School Before Six is usually used by working preschool teachers as a resource material to help them diagnose children's needs and select appropriate activities. It is also applicable as a textbook in teacher training courses. User satisfaction in both situations (measured by sales) has been enthusiastic.

ASSESSMENT PROVISIONS

There are no formal testing procedures for teachers who read this book. Sample assessment checklists for children, called needs and plans sheets, are provided in the appendix to volume II. These are the records teachers keep to diagnose children and prescribe activities for them.

TIME REQUIREMENTS

School Before Six is a resource material for preschool teachers. It can provide a complete teaching strategy and all the activities a teacher might use in a preschool class during a year or it can be used occasionally as a reference or supplement for a normal preschool curriculum.

ASSURANCES AND CLAIMS

School Before Six was developed and tested by researchers and teachers at the Cornell Nursery School and at five other nursery schools in Ithaca, New York, and Wilmington, Delaware. No reports of harm have been associated with the use of this product. The diagnostic approach presented in the materials is applicable to children in all locations and socioeconomic settings. The materials do not demand one teaching style but encourage teachers to use the materials in their own way.

The first edition of *School Before Six* was published and distributed through Cornell University. It sold more than 4,000 copies. Selected early childhood specialists and users of the first edition filled out an extensive questionnaire on the value and usefulness of the diagnostic approach, the activities presented, and the format of the book. These criticisms and suggestions led to revisions which are incorporated into the second edition.

RD 050 033

From the dramatic response CEMREL has received to its publication, we conclude that *School Before Six* fills an important need for diagnostic and developmental classroom activities for young children. Many teachers ordering the book have learned of it from their colleagues who are enthusiastic about the many helpful ideas it contains.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
School Before Six, vols. I and II	1 each	vol. I, 7.00; vol. II, 8.00		

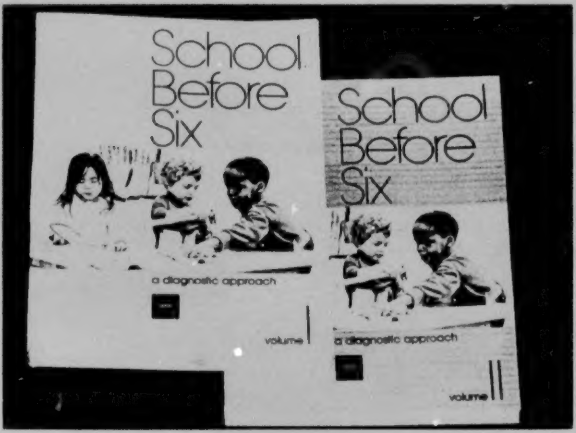
DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139
Cornell Research Program in Early Childhood Education (part of the National Laboratory on Early Childhood Education)
Cornell University
Ithaca, N.Y.

Laurel Hodgden, Product Developer

AVAILABILITY

School Before Six carries a 1974 copyright. It is available from the publisher:
CEMREL, Inc.
3120 59th St.
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF FEBRUARY 1975 ■

TEACHER EXPECTATIONS EARLY ELEMENTARY PROGRAM

A three-chapter training package to help kindergarten teachers with classroom management problems that might be caused by teaching behavior

Teacher Expectations is a training package that alerts teachers to the impact which they have upon the students they teach. It helps teachers understand how children are affected in their classroom performance by what the teacher expects of them.

The program is concerned not only with the essential cognitive skills that students may acquire, but also with their social and emotional development; therefore, it has been written from the learning theory-behavior modification point of view. This product attempts to help teachers with classroom management problems that may be caused by their teaching behavior.

SUBJECT AREA(S)

Subject areas include how personal beliefs, attitudes, and expectations affect perceptions and behavior; how teachers communicate their expectations to students and which teacher expectations promote effective learning; and types of behaviors that indicate problems and should be changed, e.g., projecting negative attitudes toward lessons, placing too great a value on correct answers and showing frustration with failure, thinking or talking about children in ways that suggest permanent labels ("slow learner," "aggressive child"), and failing to follow through on rules and directions.

INTENDED USERS AND BENEFICIARIES

Teacher Expectations was designed for kindergarten teachers, especially those who are teaching children from different experiential backgrounds. While formal testing has not been done, it has been reported that this product has been useful for K-12 teachers. The product has been requested by college and university staffs, human development centers, research and development centers, inservice training institutes, and administrators of school systems. Other potential users are parent-teacher organizations, teachers of special students (e.g., those with birth defects or who are blind, deaf, or mentally retarded), State agencies (e.g. child welfare departments), managers and personnel of businesses and industries, churches, and civic and social organizations. Individual potential users may include lawyers, policemen, social workers, doctors, nurses, foster parents, salespersons, and politicians.

GOAL(S) OR PURPOSE(S)

The purposes of this product are: (1) To describe for teachers those expectations which promote effective learning, (2) to discuss teaching approaches that will help produce positive results, and (3) to help teachers analyze their attitudes and expectations and replace the inappropriate behavior with an appropriate behavior.

PATTERNS OF USE

Teacher Expectations is a self-instructional package that should be referred to throughout the year. It can also be used for inservice and preservice workshops and as an ongoing training package for teachers, supervisors, and others linked with any task where people are involved.

ASSESSMENT PROVISIONS

Assessment provisions are in the form of self-administered checklists for teacher use.

TIME REQUIREMENTS

The training package is intended for use as an ongoing information source; the amount of time spent in assimilating and implementing the suggested strategies depends upon the judgment of the individual user.

IMPLEMENTATION PROCEDURES

Although the manual is primarily self-instructional, trainees may benefit from workshops where detailed explanations and specific questions are addressed. To take full advantage of the individualized nature of the product, users should use the information to carefully assess themselves and to adapt helpful ideas suited for their needs.

ASSURANCES AND CLAIMS

Teachers and administrators have found the information in this manual to be appropriate for use with young children in open classroom settings, individualized learning centers, and self-contained classrooms. The information is effective in each of these instructional environments and has been effectively used with both self-contained and team-teaching strategies. Although the manual has been used primarily with individualized instructional programs for young children, comments from users indicate its applicability in different situations involving all grade levels.

The manual was utilized by multicultural teachers. The program staff, also multicultural, reviewed the materials for biases and made changes where necessary. Since marketing, the product was carefully reviewed by school personnel who expressed a desire for their schools to become demonstration centers. The program staff has found the manual usable without training, therefore insuring replicability and transportability.

RD 050 034

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Training manual (*Teacher Expectations*)	1 per person	6.00		

DEVELOPER/AUTHOR:

**Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701**

**Robert S. Randall, Program Director
Reva P. Bell, Project Coordinator**

AVAILABILITY

Teacher Expectations **was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:**

**National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702**

INFORMATION CURRENT AS OF MARCH 1975

RD 050 035

HOME-ORIENTED PRESCHOOL EDUCATION (HOPE)

A system for delivering comprehensive home-oriented preschool education for 3- to 5-year-olds in rural Appalachia

The *Home-Oriented Preschool Education* (HOPE) program was developed to deliver effective early childhood education to rural Appalachia. Rural Appalachia imposes many barriers to early childhood education: A low tax base and the physical isolation of rugged terrain, poor roads, and scattered population. HOPE bypasses these barriers with daily preschool lessons broadcast over television. Paraprofessional home visitors and parents assist the children's comprehension and study of the television lessons. Once a week, the children meet for instruction by a certified early childhood teacher in a mobile or stationary classroom.

HOPE began in 1968 under U.S. Office of Education auspices and later came under its National Institute of Education aegis. The Appalachian Educational Laboratory, Inc., (AEL) has been responsible for curriculum development, the preparation of television lessons (a series entitled "Around the Bend"), and all necessary support materials. AEL has carried out these responsibilities through a system of research and development involving field testing and replication studies.

Utilizing this process, AEL has prepared the following instructional materials: A seven-booklet implementation guide (HOPE Manuals), a home visitor training package, and the four-volume *Competency Base for Curriculum Development in Preschool Education*. Two packages of learning activities, one for home use and one for classroom use, and a discussion guide for parent groups will be field tested next year. AEL has integrated feedback from the original television series into several new video tapes. These pilot programs are high-quality, color productions.

The HOPE program has been acclaimed by local, State, and Federal agencies, and the U.S. Information Agency has selected it for overseas recognition. Other home-based early childhood education programs have been modeled after HOPE.

SUBJECT AREA(S)

The subject area is early childhood education.

INTENDED USERS AND BENEFICIARIES

The users are local and State education agencies which are adopting early childhood education for 3- to 5-year-olds. Beneficiaries are the children and parents who learn how to better work with their children.

GOAL(S) OR PURPOSE(S)

The goal is to provide comprehensive home-oriented preschool education for rural Appalachian 3- to 5-year-olds.

PATTERNS OF USE

Although HOPE is a complete, integrated program, its parts can be used separately. The television lessons regulate the sequence. In different broadcast areas, the lessons may be varied in weekly blocks. The home and classroom materials are sequenced in weekly blocks that match the television lessons. Some local adaptations have used television as a classroom component rather than a home component.

Parents are provided with a weekly television guide that informs them of the subject covered in each lesson and the suggested followup activities at home. The paraprofessional home visitor contacts each family once a week, demonstrating to parents ways of working with the child and observing the child's progress. The children meet for a 1/2-day session with the classroom teacher once a week.

Current research and development centers around age-grading the materials in the weekly television guide, and the organization of regular parent meetings. Activities in the guide are being age-graded to fit the child's level of development. Regular parent group meetings can lead to a discussion of mutual problems and can provide effective support for home-based learning.

Finally, a coordinator of field operations handles scheduling and other program maintenance and administrative functions.

ASSESSMENT PROVISIONS

Formative evaluation has been used for each of the three components and will be used as the new materials are produced. Future adopters can follow these same evaluation approaches. An evaluation plan has been designed for testing the new materials. Further work, however, is needed on the child evaluation instrument during 1976.

TIME REQUIREMENTS

Time requirements correspond roughly to the school year, e.g., 170 1/2-hour daily television lessons released over 34 broadcast weeks.

IMPLEMENTATION PROCEDURES

Television scheduling is required. Mobile or stationary classroom facilities must be provided in the vicinity of each 25-home route. A storage and distribution system is needed for the weekly sets of materials distributed to home, visitor, parent, and teacher. Paraprofessional supervision and inservice sessions should be provided. Space for small-group testing of children is desirable. Organizational requirements are difficult to discuss because of user adaptations and local variations in school organization.

Summary Cost Information

Available cost data based on prototypes are sufficiently outdated so as to be potentially misleading, and are omitted. Cost figures of revised materials, including television lessons, are incomplete, but are being developed. Other required materials appear under separate product descriptions (e.g., learning activities files, home visitor training package).

Personnel Required For Product Adoption and Implementation

When the new series becomes available, each home visitor will go to an average of 25 homes per week, serving approximately 30 children. A teacher and aide conduct 2 sessions per day with approximatley 15 children in each. A unit team of 4 home visitors, 1 teacher, and 1 aide serves 120 children. Field office staff varies in size depending on the number of unit teams in operation. The field director and a staff of 2 can administer up to 16 units of 120 children each—optimally there should be fewer units than this. One day per week is devoted to inservice training for all program staff.

Prior estimates indicated that the per-child cost of participation in all components of the program for 1 year was about one-half the cost of kindergarten programs (see *"A Comparison of AEL's Preschool Education Program With Standard Kindergarten Programs,"* ED 061 023).

ASSURANCES AND CLAIMS

Assurances

The prototype program was used for 3 years with about 1,000 children with no reports of physical or psychological harm attributable to the program. No such incidents have been reported by the several educational agencies performing their own replications. Minor accidents, however, are frequent in most early childhood programs and should be anticipated.

Staff felt that problems of social fairness were present in the prototype materials, and all new products have been designed to eliminate such bias. Sample materials have been reviewed by early childhood educators and National Institute of Education reviewers, who have not detected this as a design problem. Continued monitoring is, however, necessary during materials preparation to assure implementation. It is somewhat easier to affirm that racial bias is absent than that sexual bias is absent. To the extent that the television program reflects the day-to-day realities of Appalachian rural life, male and female roles are differentiated. The program attempts to avoid sex-role stereotyping and tries in a low-key manner to display a fuller range of male and female behaviors while accurately depicting Appalachian people and life.

Independent replications and/or adaptations have been sufficiently documented to assure that the HOPE process is transportable. Adaptations of the original HOPE Program are ongoing this year in four separate locations: The DILENOWISCO Educational Cooperative, Norton, Virginia; Clinch-Powell Educational Cooperative, Harrogate, Tennessee; Top of Alabama Regional Educational Service Agency, Huntsville, Alabama; and Project HOPE, Gallipolis, Ohio. The same features which were replicable and adaptable in the original series have been designed into the new series.

Claims

Three years of field studies plus 2 years of independent replications show that children who have been through 1 year of HOPE make significant cognitive and social development gains. They enter 1st grade as well prepared as children who have been through kindergarten. Program variations have been reported regarding television only, television and home visitor, all three components, and control groups which received no preschool education. These findings have been documented extensively in technical reports available through the educational resources information center.

In addition to avoiding social bias, this program attempts to present the races and sexes in a fair and socially constructive light, as shown in the "Guidelines for Writers," a document for television script writers involved in the production of television lessons. The involvement of paraprofessionals and parents in the child's education also tends to rectify the less-publicized bias of professional elitism which has said in the past that only professional educators can teach children.

Although the original products that were field tested for 3 years were highly effective, they were prepared on a minimal budget to permit testing of the basic design. Technical analyses of product quality were made subsequently. All products have been redesigned to be of marketable quality while maintaining the successful features of the original series. Recognized national television professionals are now in charge of television production. The ultimate success of these revisions must still be determined, although conceptual reviews of them have been endorsed by outside reviewers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent viewing	1 per parent		Weekly	Prototype materials are being revised
Home visitor guide	1 per home visitor		Weekly	Prototype samples are available from AEL
Classroom guide	1 per teacher		Weekly	
Television lessons	Timely release in each community		Reusable	

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

Original products were completed during 1968-71. These are well worn from use and are now in storage. Samples of the revised television lessons will become available in spring 1975. The program staff is ready to produce the new television series and related materials, although prior funding cutbacks forced their cancellation during 1975. Program staff have been authorized to seek alternate sources of funding to permit the production to proceed. Viewing of sample materials can be arranged by contacting the marketable preschool education program staff. For further information, contact:

Edward Earl Gotts, Director
Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 036

HOME VISITOR TRAINING PACKAGE (HVTP)

Materials for 2-week training sessions for beginning home visitors who will work with parents to help increase the development of their children

The *Home Visitor Training Package* (HVTP) provides entry-level skills and orientations to trainees who are beginning work as home visitors in connection with home-oriented early childhood education programs. It includes materials and experiences necessary for an initial 2-week training experience, assuming only that a local selection process has been used to obtain personable and responsible individuals with at least a high school education.

The package was created to meet the practical necessity of preparing home visitors to work in AEL's *Home-Oriented Preschool Education* (HOPE) program. The experience of a 3-year field test of the HOPE program in several Appalachian communities, plus subsequent replications, provided a rich experience base for the package design. It is the first and only set of home visitor training materials that has been designed to do the entire job of preparing a paraprofessional recruit to assume the important responsibilities of working directly with parents around the development of their preschool children (aged 3 to 5 years). Its design, however, can be adapted to prepare a home visitor for programs serving the entire early childhood age range (birth to 8 years).

Programed lessons are designed to accomplish specific behavioral outcomes. The approach is experience based, using many simulations—some performed by the trainees and others experienced via the multimedia portions of the package. The trainer's behavior is guided step by step through the 2-week training period. Trainees study, interact, experience, and perform planned exercises. The learning relates directly to the responsibilities that trainees will assume as home visitors. Regular feedback and an overall evaluation indicate trainee progress and areas in which further learning is needed.

SUBJECT AREA(S)

Subject areas include self-awareness and self-appriasal, the home-oriented preschool education process of early childhood education, helping children grow and develop, introduction to teaching and learning, testing others to test ourselves, finding and preparing materials, use of behavioral objectives, developing questioning skills, building listening skills, working with others, the art of respecting others, and resources.

INTENDED USERS AND BENEFICIARIES

Intended users are school systems, Home Start, and other agencies or programs using home visitation. Paraprofessionals initially entering this career area or those being retrained are the primary beneficiaries.

GOAL(S) OR PURPOSE(S)

The purpose of the *Home Visitor Training Package* is to prepare trainees for initial entry into the career of home visitation.

PATTERNS OF USE

Units are organized into self-contained chapters. Though they may be sequenced differently or used selectively, evaluation data are applicable only to the total package sequenced in the approximate order designated.

ASSESSMENT PROVISIONS

A pretest and posttest are provided. Feedback is also generated by periodic exercises and activities.

TIME REQUIREMENTS

Two full weeks or 50-60 hours are required to complete the training.

IMPLEMENTATION PROCEDURES

Special equipment required includes: Video tape monitor and deck slide and tape equipment, and a 16mm projector. Trainers must receive 1 to 2 days of orientation and familiarization (one-time event). A school system using the home-based approach to provide preschool education will have organized its staff in an appropriate manner to deliver the program. The HVTP is directed at one segment of that staff. The multimedia portions of the package are relatively expensive to purchase and would be used infrequently in any single locale. The creation of a rental arrangement would seem to offer a practical solution to this potential problem.

Personnel Required for Product Adoption and Implementation

Two consultants familiar with the *Home Visitor Training Package* would be required for 2 days to orient the supervisor/coordinator and trainers to the training package.

This would be a one-time expense, and the consultants could handle up to 15 trainers. One trainer and one classroom aide would be required for each group of 25-30 trainees. The classroom aide would not need to participate in the orientation session. The trainers need to be skilled adult educators, but they are not required to be knowledgeable in the child development area since the HVTP contains the information needed by the home visitors. The actual training session for the home visitors would extend over a 2-week period.

Initially, the consultants would come from AEL, although subsequent users of the HVTP can in turn serve as consultants to new groups of trainers.

ASSURANCES AND CLAIMS

Assurances

No observable or conceivable physical harm would result from participation; no incidents of physical harm have occurred to date among 100 trainees at 4 geographically dispersed sites. Psychological harmlessness is more difficult to affirm, since such incidents may not be reported as readily as physical harm. The only assurance possible is that there has been no documentable psychological harm among 100 trainees. (See trainee comments in Technical Report No. 45, cited below.)

For a variety of local reasons in rural Appalachia, all local education associations have chosen to use female paraprofessionals as home visitors. (An overwhelming majority of the parents or grandparents receiving these visitors are also females.) The materials thus focus upon a female home visitor, usually visiting with a female parent. The generic use of "he" has been dropped for these reasons, and the home visitor is referred to as "she." The social ethic of rural Appalachia, for which these materials were created, make it unlikely that a male home visitor would be acceptable or could be imposed by Federal social "engineering" guidelines since associational segregation by sex of adults is often viewed as a matter of morality or at least of "good appearances."

In the area of race, all materials use multiracial illustrations. Race is not a topic in the actual text.

Training was conducted at four different geographically dispersed sites in 1973. As yet, however, no materials have been prepared to orient or familiarize trainers, so this must be provided by consultants who are familiar with the entire process. A local or State supervisor could, however, perform this task after receiving initial preparation. Factors in home visitor recruitment and selection have not been studied, nor have home visitor effectiveness and retention.

Claims

Significant gains occurred on a curriculum-content, criterion-referenced posttest. Gains were variable by module across training sites, demonstrating variations in implementation (which have been documented in other ways also, as reported in *Evaluation of the Prototype Home Visitor Training Package*, Technical Report No. 45, ED 093 358). No changes occurred on the *Minnesota Teacher Attitude Inventory*.

The original product was developed, evaluated, and revised based on evaluation results. Thus, conscientious procedures were used in the development cycle. A smaller test is being made of the revised materials during fiscal year 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars*	Replacement Rate and Cost	Source if Different from Distributor
Trainer's notebook	1 per trainee	9.00-11.00	Indefinite (retained by home visitor)	
Trainer's manual	1 per 25-30 trainees	75.00	Indefinite	
Multimedia package	1 per class unit	2,000.00-2,500.00	Indefinite	
Parent's notebook	1 per home	15.00-20.00	Indefinite (retained by parent)	

*All represent initial-run high costs including such items as artwork. Later production costs will be lower; but they are not currently available.

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

The revised package is available on a limited basis at cost during the period that it undergoes field testing of the revision during 1975. A final revision (minor) will be required following current field testing. Provided that the revision can be accomplished during 1976, it should be placeable with a publisher (or otherwise disseminated) by summer 1976. For further information, contact:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

HOME VISITING WITH MOTHERS AND INFANTS

A home-visiting approach to increase infant educability

Home Visiting With Mothers and Infants places emphasis on homes as educational settings and parents as educational change agents. Learning and teaching are continuing processes. The major concern is for working with mothers and infants in their homes to increase the educational potential of the infants. The mother, the infant, and the home visitor belong to a team that attempts to foster the development of the infant. The home visitor works in the home, respecting the dignity, rights, and values of the home. The home visitor works with and through the mother to promote the development of the infant.

A home-visitor approach to early childhood education is a meaningful strategy because it incorporates parent involvement in the educational process, the use of paraprofessionals as effective educational change agents, cost and benefit considerations, and education in a nontraditional setting. By using to advantage the fact that education is transmitted in all contexts, by all people, in all places, quality education can be achieved.

Major considerations that underlie the home-visiting approach have to do with provisions recommended for the infant, the role of the mother, and the role of the home visitor.

Home Visiting With Mothers and Infants was a downward extension of work done at the Demonstration and Research Center for Early Education (DARCEE) with young children 3-6 years old. *A Guide for Home Visitors* (R. Giesy, 1970) provided information about the home-visiting approach. This manual was written as a supplement to provide information about a home-visiting strategy with mothers and infants and home-visitor practices to modify mothers' interactions with their infants.

The contents of this manual range from general, *a priori* considerations to specific, empirical findings. Chapter I discusses considerations that underlie the home-visiting approach. Chapter II gives details in the overall process of planning, implementation, and evaluation of the home-visiting program with mothers and infants. Chapter III specifies how *Home Visiting With Mothers and Infants* proceeded. Chapter IV presents suggestions, observations, and evaluations made during the conduct of *Home Visiting With Mothers and Infants*.

SUBJECT AREA(S)

Early childhood education including parent training program and home intervention with infants is the subject area.

The program is specifically geared to parents of a low-socioeconomic status. The book discusses considerations that underlie the home-visiting approach, gives details for implementing such a program, describes how home visiting proceeds, and presents suggestions and observations made during home visiting.

INTENDED USERS AND BENEFICIARIES

The intended users are those interested in learning more about the home-visiting approach as used in this project: Social workers, counselors, teachers, churchworkers, and others who carry out home intervention programs.

GOAL(S) OR PURPOSE(S)

The major goals of the project are to describe an approach for working with mothers and infants in their homes to increase the educability of the infants and to provide information about a home-visiting strategy with mothers and infants, and home-visitor practices to modify mothers' interactions with their infants.

PATTERNS OF USE

The manual can be used by any home visitor such as a social worker to learn more about the home-visiting strategy developed through the DARCEE program.

ASSESSMENT PROVISIONS

There are no formal testing procedures for the people who read this manual. Mothers who participate in the home-visiting program are asked to write a short explanation of "What this program has meant to me." Specific assignments are given to the mother by the home visitor, and recommendations are made by the home visitor to the mother. During the conduct of home visits, there were opportunities for field testing and observing. The home visitor was required to fill out forms in which objectives for the mother and the behavior of the mother and infant were given. This was evaluated and recommendations were made.

TIME REQUIREMENTS

The manual requires 2 hours' reading time.

RD 050 037

IMPLEMENTATION PROCEDURES

If the home-visiting program as described in the manual is to be used in other communities, trained personnel to serve as the home visitors would need to be hired. Materials which were used in the lessons were the usual household items or dime store items and should be easily available.

ASSURANCES AND CLAIMS

All attempts were made to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content in this product as well as in the project upon which it is based.

The participants in the project reported favorably about its worth to them. They all felt they had seen positive changes in their children and in their families as a result of participating in the program. The developers were trained specialists in early childhood education. They used careful field test and research methods in developing, implementing, and assessing the results of this project.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Home Visiting With Mothers and Infants	1	Not determined		

DEVELOPER/AUTHOR:

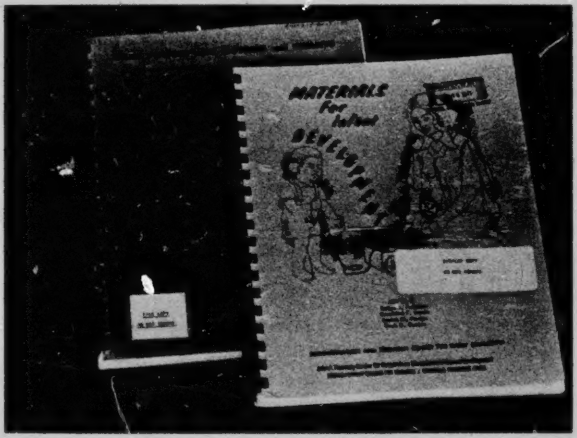
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Demonstration and Research Center for Early Education (DARCEE)
George Peabody College for Teachers
Nashville, Tenn.

Bettye J. Forrester, Product Developer
Beulah M. Hardge, Product Developer
Doris D. Outlaw, Product Developer
Geraldine P. Brooks, Product Developer
James D. Boismier, Product Developer

AVAILABILITY

***Home Visiting With Mothers and Infants* was completed in 1971, and the project upon which it is based was conducted in 1970. Due to limited quantity, the report is not available for purchase at this time.**



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 038

MATERIALS FOR INFANT DEVELOPMENT

A description of 40 toys and other objects that can be used to promote infant development in the home

The purpose of this manual is to discuss materials that promote infant growth and development. *Materials for Infant Development* is written as a manual that complements and extends information that was presented in a procedural manual entitled *Home Visiting with Mothers and Infants* (Forrester, Hardge, Outlaw, Brooks, Bosimier, 1971). Both manuals were prepared to describe an approach to working with mothers and infants in their homes to increase the educability of the infants.

The Demonstration and Research Center for Early Education (DARCEE) infant study was the context in which attention was given to infant development and *Materials for Infant Development*. Work on infant development and *Materials for Infant Development* was a downward extension of work done at DARCEE with young children 3-6 years old.

The contents of this manual share with the reader understandings about infant development and provisions for infant development that have been found meaningful and useful. Chapter I outlines areas of early development and several provisions needed for development. Chapter II gives details of the materials that were field tested with 20 mothers and their infants. The chapter includes a description for each of 40 materials that were developed and used in the project, including how it was made, why and how it was used, and a sketch of the material.

SUBJECT AREA(S)

Early childhood education as a home intervention program for infant development is the subject area. The manual outlines areas of early development and provisions needed for development, details the inexpensive materials that were introduced into homes to promote infant development, and shows how materials were related to the home-visiting program.

INTENDED USERS AND BENEFICIARIES

The intended users are those who are interested in learning about toys and other objects which are safe for children and how these materials can be used to facilitate development: Social workers, counselors, teachers, churchworkers, and others who carry out home intervention programs.

GOAL(S) OR PURPOSE(S)

The purpose of the report is: (1) To discuss materials that promote infant growth and development, (2) to share understandings about infant development and provisions for infant development gained through the project, and (3) to describe an approach to working with mothers and infants in their homes to increase the educability of the infants.

PATTERNS OF USE

The manual is self-contained. It may be read and applied to other early education programs, especially those serving low-socioeconomic-status families. It can be used by educators or home visitors wishing to learn more about materials for infant development.

ASSESSMENT PROVISIONS

There are no formal testing procedures for those who read the book. Copies of the forms which the home visitors used in the project are included in the book as well as the forms that are used by the materials specialist in evaluating the materials which were field tested in the project.

TIME REQUIREMENTS

Two hours are required for reading time.

ASSURANCES AND CLAIMS

All efforts have been made to avoid any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content in this product. No reports of harm have been associated with its use.

The success of the project is verified by future toy purchases made by the parents who took part in the program. The last home visits of the DARCEE infant study were made in November 1970. After the 9 months of involvement with the project, the mothers made carefully reasoned choices of commercial toys for their infants. Some shopped for discount toys and others planned for lay-away purchases, giving equal attention to the appropriateness of an item for their infants. The Christmas 1970 purchases made by the families, in general, were good choices of materials for child development.

RD 050 038

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Materials for Infant Development (book)	1	Not available		

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
Demonstration and Research Center for Early Education (DARCEE)
George Peabody College for Teachers
Nashville, Tenn.

Bettye J. Forrester, Project Coordinator
Geraldine P. Brooks, Materials Specialist

AVAILABILITY

Materials for Infant Development was completed in 1971. Multiple copies are not available for purchase at this time.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 039

MULTIMEDIA TRAINING PACKAGE FOR PARENTS "LIVING AND LEARNING IN THE HOME"

A multimedia training package for low-income parents of preschool children for teaching their children at home

Living and Learning in the Home is a multimedia training package for low-income parents of preschool children. Designed for a leader, an observer, and 15 parents, the package is designed to be used in 5 sessions of approximately 1-1/2 hours each.

The sessions show parents how they can teach their children throughout the day by talking about home activities and household objects, and how they can encourage their children to search independently for answers and solutions. The sessions show parents how to use home activities and household objects to enrich their children's learning without purchasing commercial materials.

Each session procedure includes detailed information on how to present the particular concepts included. Following a statement of the purpose and focus of the session, the format is as follows: Introduction, review (if appropriate), overview of media presentation, presentation, discussion, group participation activities, summary, and evaluation. Sample dialog is included when appropriate.

Although materials and program ideas for use in parenting programs are available, they are generally scattered, unvalidated, and unreplicated. Further, evidence suggests that supportive behavior by a valued person, such as a mother, correlates highly with cognitive development. Yet no systematic attempt is being made to build upon this evidence, and little effort is being made to use modern technology for wide application of successful strategies. These lacks and needs in combination present one overriding problem—adults involved in performing services for children need more knowledge and skill in child care.

Materials currently available for use with parents tend to be heavily oriented toward middle-class parents and heavily dependent upon the printed word. Few, if any, are organized in modular form so that they can be presented independently or are presented in multimedia format so that the adult learner can succeed with only minimal reading skills.

The package includes a leader's manual, detailed session procedures, and a variety of media products—video tapes, filmstrips, films, transparencies, and take-home pamphlets. Each session procedure is designed with an introduction, a straightforward presentation of concepts, group participation activities, and a summary.

The leader's manual includes specific instructions on techniques of group leadership; directions for increasing participation through techniques such as role playing, simulation, and group discussion; and an overview of the training sessions.

SUBJECT AREA(S)

The module includes the following subject areas: (1) Parental attitudes, behaviors, and feelings and their effects on children; (2) using home activities to help children learn; (3) materials to use with children at home; and (4) how to structure a learning experience for a child at home.

INTENDED USERS AND BENEFICIARIES

The intended users of this module are parent leaders and low-income parents of preschool children.

GOAL(S) OR PURPOSE(S)

The participants will: (1) Recognize that their attitudes behavior, and feelings affect their children; (2) understand the value of home activities in helping children learn; and (3) be able to use home materials and activities with their children.

PATTERNS OF USE

The instructional principles of developing awareness, knowledge, or comprehension, followed by application, were used. A variety of teaching strategies is described in the leader's manual and are also built into each session procedure. These strategies include large- and small-group discussion, simulation activities, role play, problem-solving situations, games, and evaluation, as well as direct presentation of information.

The group leader secures a meeting room and necessary equipment, operates audiovisual equipment, leads the sessions, and distributes and collects evaluation forms. Participants watch media presentations, participate in large- and small-group discussions, role play, and problem-solving activities. Take-home pamphlets which reinforce concepts presented in the sessions are provided.

Sessions are sequential and cumulative.

RD 050 039

ASSESSMENT PROVISIONS

Tests of participant knowledge of module content are provided for use at the beginning of the package and following completion of the package. In addition, criterion-referenced tests of content for each session are provided.

TIME REQUIREMENTS

The package consists of five sessions, each approximately 1-1/2 hours long.

IMPLEMENTATION PROCEDURES

No special equipment is required, and all materials are provided. No specific previous training is required, but a 1-day training session for leaders is recommended.

ASSURANCES AND CLAIMS

Assurances

No reports of harm—physical, psychological, sociological, or other—as a consequence of any activity which goes beyond the application of those established and accepted methods necessary to meet user needs have been received. No complaints of ethnic or sex-role bias have been received.

Claims

Living and Learning in the Home is a multimedia approach developed in response to the assessed need for information on basic parenting skills, with minimal reliance upon printed materials and/or direct lecture. The topic was selected as important for low-income parents of preschool children by two advisory groups, one comprised of professionals in the field of early childhood education, the other composed of low-income parents and teachers of various ethnic groups.

The Southwest Educational Development Laboratory follows a systematic process for the development of educational products. This product development incorporates the entire gamut of activities in the formulation, development, testing, and evaluation of an educational product so that quality is assured.

Products are cycled through a design test, after which materials are revised on the basis of feedback from the target population, leaders, and observers; products then go through a pilot test and revision on the basis of feedback; and finally, they go through a field test and final revision based on field data.

The multimedia training package for parents, *Living and Learning in the Home*, has been cycled through the Laboratory's developmental process, and revisions will be complete by November 30, 1975.

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

AVAILABILITY

This product exists in prepublication form only; no copies are available for distribution at this time. Development of two additional modules began in spring 1975, with a projected completion date of December 1976. Copyright is pending.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 040

PARENT/CHILD TOY-LENDING LIBRARY

A toy library that helps parents learn how to teach problem-solving skills to 3- and 4-year-old children

The *Parent/Child Toy-Lending Library* was developed by the Far West Laboratory to help parents learn to use toys and games at home to teach specific skills, fundamental concepts, and problem-solving behavior to their 3- and 4-year-old children. The overall goals are to promote the child's intellectual development and positive self-concept. The toy library is based on research which concludes that parent/child interaction can influence self-confidence and that parents can be trained to change a child's self-concept. In conjunction with the toy library, there is a 16-hour course in which parents learn techniques that can promote the child's self-confidence and growth in the following areas: Identifying sounds; color matching naming, and identification; shape and size discrimination; and sensory concepts.

By playing the role of a child, the parent learns to use the "discovery" approach with the toys. This involves the child's exploration and free play, self-pacing and self-direction, and the parent's responding to the child. Parents learn to use positive instead of negative terms (e.g., "Sit on the floor" instead of "Don't climb on the shelves") and to use precise descriptive language ("The blocks are all red" rather than "They match"). Parents learn to use a variety of education materials they can take home: Sound cans, "feely bag," color lotto, color cubes, flannel board, table blocks, spinner board, hundred peg board, alphabet board, pattern box, and books. Discussions of child growth and development principles, discipline, and parent/teacher relationship are included in the course. Several days of special training for the course-leader/librarian are required.

Parents view films, filmstrips, and demonstrations showing ways to use each toy; and they assume the roles of children as they learn to organize and conduct activities that will encourage their children to make decisions and solve problems.

In addition to viewing films and demonstrations and role playing with other adults in class, parents are expected to take one toy home each week for use with their children; to discuss with the course leaders and other course members topics related to the education of their children; and to practice specific ways of responding to or working with their children to promote physical, intellectual, or emotional growth.

SUBJECT AREA(S)

Parents are helped to learn to develop their children's intellectual abilities and self-concepts and to take an active role in their children's education.

Parents learn to use the toys and techniques of the course to teach their children the following concepts and skills: Color matching, color naming, color identification, letter shape matching, shape naming, shape identification, letter recognition, numerical concepts, relational concepts, sensory concepts, problem solving, verbal communication, verbal comprehension, and auditory discrimination.

INTENDED USERS AND BENEFICIARIES

Intended users are parents willing to be trained to use educational toys and games at home with their preschool children. Teachers and teaching assistants in nursery schools, day care centers, and primary classrooms may also be users. Beneficiaries are the individuals just mentioned and their children or students.

GOAL(S) OR PURPOSE(S)

Parents who complete the course will feel that (a) they have learned a new way to help their children acquire skills and concepts that the parents think are important and (b) they have a better understanding of what their children are capable of learning and doing. In most instances, this belief will result in the parents' feeling that their children are capable and can be successful. The children should learn how to solve some problems involving skills and concepts and continue to develop intellectually, as well as in positive self-concept, provided that the parents continue to help them in ways similar to those learned through the course.

PATTERNS OF USE

In the 8-week training course (2 hours per session), parents are introduced to the materials and techniques of the program and are taught how to use each of the basic toys (color lotto, stacking squares, number puzzle, "bead-o-graph"). Parents are encouraged to continue working with their children after the course in a similar manner, using ordinary toys or objects found in most homes (pots and pans, salt shakers, nesting trays), or borrowing some of the supplementary "loaner" toys developed for the toy library (alphabet board, property blocks, hundred peg board).

ASSESSMENT PROVISIONS

The librarian manual includes a section that enables parents (as well as the course-leader/librarian) to determine how well the program is working locally. Forms are provided to facilitate comparison of the toys and games in terms of children's interest in them, clarity of directions for parents, degree of difficulty at the games, extent of children's learning and the like.

TIME REQUIREMENTS

Eight weeks, with one 2-hour session per week are necessary for completion of the training course.

IMPLEMENTATION PROCEDURES

The library can be located in any central building, e.g., school, church, vacant store, community center. The course leader should be a community member (local parents might feel less comfortable with an "outsider"). Refer to the publication, *"A Guide to Securing and Installing the Parent/Child Toy-Lending Library"* for suggestions on organization. (See "Special Equipment and Facilities.")

The required training for the course-leader is intended to provide familiarity with the relation of self-image to learning, and with the concepts, techniques, and materials of the toy library; and to develop skill in training the parents to use and invent new learning activities and in providing the information necessary for administering the library. Two to five days of training, depending on the needs of the course-leaders, are conducted by a consultant whose services can be arranged by contacting the Far West Laboratory.

After the decision to organize a *Parent/Child Toy-Lending Library* has been made, contact Richard Bateman, Educational Services, Far West Laboratory for Educational Research and Development, 1855 Folsom Street, San Francisco, California 94103. Under contract to the adopting agency, he can lend technical assistance in initial planning and organization and in making arrangements for course-leader/librarian training.

SPECIAL EQUIPMENT AND FACILITIES

Filmstrip projector, audiotape cassette recorder, and a 16mm sound film projector are required. In addition to the Toy Library toys, the library should be supplied with other kinds of toys, children's books and records, games, and educational materials, all of which parents may borrow.

"A Guide to Securing and Installing the Parent/Child Toy-Lending Library" gives an overview of the program and many helpful hints for initial planning. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock No. 1780-0993, $0.60).

ASSURANCES AND CLAIMS

Assurances

Based on 2 years of laboratory-supervised preliminary and field testing and 3 years of operational use nationally without laboratory intervention, the toy library can be used successfully in any setting where a course-leader/librarian is available to conduct the parent training course and to recruit local participants. Moreover, General Learning Corp., has made all necessary adjustments in manufacture of the toys to meet child safety requirements.

The materials have been extensively used with all major U.S. minority groups, thus establishing that the toys and games are "culture free" and do not demean the ethnic or racial heritage of parent or child. (Parent and librarian guides are available in Spanish; a Chinese Parent Guide is also available.)

Claims

The *Parent/Child Toy-Lending Library* is a well-developed, readily available, and extensively used research- and development-based training program for parents of preschool children. Many hundreds of toy libraries have been established—at least one in every State of the Nation, ranging up to statewide use in Alaska and Utah—without any difficulties being reported to the developers. However, no funds have been made available to evaluate ongoing toy library programs to ascertain the extent of their outreach and continuation potential.

Program evaluation is based on results from field tests at four sites, one with working-class black parents, one with middle-class white parents, and two with Mexican-American and white working-class parents. The toys not judged interesting to the children were revised. As a result of the course, parents met three of the four specific course objectives: To feel competent to help their child learn basic skills and concepts, to feel that the child can learn and can be successful, and to be more effective in aiding their child's development. In addition, parents showed a generally high degree of interest in the course. The only parent objective with inconclusive evidence concerned competency to influence decisions affecting the child's education. Field test results also indicated that the children learned a considerable amount during the duration of the course. The training program for course leaders was also judged highly satisfactory.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Set of basic toys	1 per parent	75.00	Reusable	
Set of 8 filmstrips and audiocassettes*	1	100.00	Reusable	
Librarian's manual	1	2.10	Reusable	
2 Parent guides	1 each per parent	1.25 each	Reusable	
16mm color film	1	200.00**	Reusable	
Training for course leader	2-5 days	Normal consultant fee		Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, Calif. 94103
Recommended supplementary items:				
Set of "Loaner" toys	1 per library	75.00	Reusable	
Miscellaneous toys, children's books, and records	As needed		Reusable	User supplies

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*Tapes are available in Chinese and Spanish as well as English.

**The film can be borrowed at no charge from Modern Talking Picture Service, Suite 4, 200 L Street NW., Washington, D.C. 20036, or from any of the agency's local offices (consult telephone directory for local address).

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Senior Project Staff (1968-72)
Glen Nimnicht
Edna Brown
Bertha Addison
Stan Johnson

AVAILABILITY

***The Parent/Child Toy-Lending Library* was copyrighted in 1971, and copyright is claimed until 1999. It is currently available from the publisher/distributor:**

General Learning Corp.
250 James St.
Morristown, N.J. 07960

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 041

TEACHING YOUR CHILD, A TELEVISED PARENT TRAINING PROGRAM

A guidebook and a television program to provide basic concepts in child rearing to the parents of economically disadvantaged preschool children

The purpose of this project is to provide parents of a lower socioeconomic status with a low-cost program by which they can learn basic principles necessary for the early behavior formation of their children.

The project consists of a guidebook and a television program through providing basic concepts of childrearing and developing desirable behavior in their children.

The primary objective of the instructional program is that parents should be able to correctly apply the principles of behavioral management to the behavior of their own children.

The guidelines around which the program was developed incorporate three types of behavior: (1) Developmental behaviors parents might wish to strengthen, (2) problem behaviors parents might wish to decrease, and (3) appropriate behaviors parents might wish to maintain.

These behavior categories were further defined: (1) Behaviors related to reading, writing and language development; (2) behaviors related to self-management by children; (3) behaviors related to successful peer/sibling interaction; and (4) behaviors related to successful parent/child interaction.

The activities in the parent guidebook, *Teaching Your Child*, are based on these guidelines.

The guidebook, written on a 3rd-grade reading level, follows a programmed learning approach. Each lesson has a cartoon illustration, a content section, and a section of questions. The questions are followed by the answers with an explanation of each one.

SUBJECT AREA(S)

Parent Training

Teaches parents to implement behavior modification principles with their own children, encourages parent and child communication, upgrades the later intellectual functioning of the children, and develops language skills and increases motivation.

INTENDED USERS AND BENEFICIARIES

Parents of preschool children, especially parents of a lower socio-economic status.

GOAL(S) OR PURPOSE(S)

The purpose of this project was to develop and test a model by which a variety of environmental enrichment techniques could be taught to lower socioeconomic status parents on a cost-effective basis. Inherent in meeting this objective was the development of an instructional program which could be efficiently presented to parents and which would offer parents the needed skills in reinforcement procedures for effectively teaching their children.

PATTERNS OF USE

Teaching Your Child is usually used by lower socioeconomic status mothers having limited educational background. The program can be completed in the parent's home by working through the written book and exercises and viewing a 30-minute TV presentation.

ASSESSMENT PROVISIONS

A multiple-choice type question is provided within each lesson. The parent checks the child's answer by turning the page and finding the correct answer with an explanation of why it was or was not correct. A summary statement follows the answer explanation. This statement reinforces the concept taught in that lesson.

TIME REQUIREMENTS

The length of the video tape is 30 minutes. The time needed for completion of the text *Teaching Your Child* will depend on how much time a parent wishes to spend on it.

IMPLEMENTATION PROCEDURE

No special training is needed in order to make use of the product. The booklet stands on its own, so parents may implement the program even if they are unable to view the video taped program.

ASSURANCES AND CLAIMS

Assurances

No reports of harm have been associated with the use of this product. The program is designed for use with low socioeconomic status parents of preschool children; however, every effort has been made within the program to eliminate all forms of racial and social bias, ethnic or sexual stereotyping. (See the Final Report section on

Formative Development and Evaluation.) Formative evaluation information was collected in two separate trials of the materials with small samples of low socioeconomic status mothers. Revisions were made based on these trials to correct for the short comings identified by developers and participants. Final evaluation showed that parents were receptive to the program, and that it could be successfully completed by parents in their own homes.

Claims

The programed test and video taped simulation have been evaluated with a representative sample of the target population. This limited field test has demonstrated a high receptivity for program content, the readability of the instructional materials, and the adequacy of the response mode.

The data indicated that: (1) The programing models for the test and video taped simulations were effective as demonstrated by the parents' ability to select correct procedural statements related to behavioral management after exposure to the program, the parents' successfully written applications of the principles of behavioral management to the behaviors of their children, and the parents' receptivity to both the programed materials and their contents; and (2) the model for tele- vised criteria checks was ineffective.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teaching Your Child	1 per family	2.75	Consumable	
Video tape (optional)		Not determined		

DEVELOPER/AUTHOR:

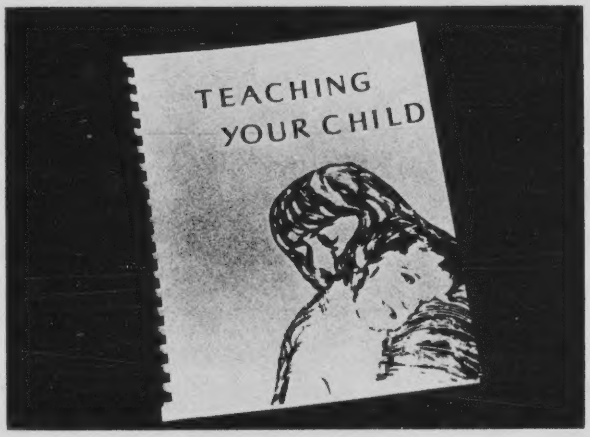
Upper Midwest Regional Educational Laboratory

CEMREL, Inc. (Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Lanny E. Morreau, Project Director

AVAILABILITY

***Teaching Your Child* text was copyrighted in 1972. It is currently available from the distributor:**
The CEMREL Institute
3120 59th St.
St. Louis, Mo. 63139
Copies of the video tape are not currently available.



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 042

TV SPOT ON READING TO YOUR CHILD

A television spot announcement and booklet to convey basic child-rearing skills to low-income parents of preschool children

This product, *TV Spot on Reading to Your Child,* is a network-quality, color-television spot announcement accompanied with printed materials that have been developed with a dual purpose: Creating public awareness of basic childrearing skills and researching the effectiveness of spot TV announcements in communicating with low-income parents. The first spot, "Clay," focuses on the importance of reading to the very young child. It is available in both 60- and 30-second versions.

The spot announcement invites viewers to write for the additional information contained in *Read to Your Child,* an illustrated 12-page booklet that explains to parents why it is important to read to very young children, provides practical suggestions for reading aloud, and advises how to select appropriate reading material for children of different ages.

TV Spot on Reading to Your Child and the booklet were developed in response to an assessed need for the dissemination of information on childrearing skills using modes of presentation suited to audiences other than the well educated and the middle class who have already been availed of most childrearing advice.

The topic was selected as important to members of the target population by two advisory groups—one comprised of professionals with extensive experience in early childhood education and parent education and the other composed of low-income parents and paraprofessionals of various ethnic groups.

The purchaser of the TV spot either arranges with local television stations to broadcast the spot on a public-service basis or buys air time. The buyer also arranges to mail the booklets to viewers who request additional information.

SUBJECT AREA(S)

Reading to your child is the subject area.

INTENDED USERS AND BENEFICIARIES

The beneficiaries for both the TV spot and booklet are low-income parents of preschool children. Both have been found appropriate for various ethnic groups.

GOAL(S) OR PURPOSE(S)

The goals are to make parents more aware of their influence on their children and to encourage parents to read to their children.

PATTERNS OF USE

The TV spot and booklet may be used alone or as part of a larger campaign on reading or on being effective parents.

TIME REQUIREMENTS

Although no minimum period of time is required, it is recommended that the spot be broadcast for at least 4 weeks.

ASSURANCES AND CLAIMS

There is no evidence to suggest that the TV spot or the booklet would induce harmful physical, psychological, sociological, or other consequences.

Both the TV spot and the booklet have been tested with target audiences comprised of Mexican-American, black-American, and Anglo-American parents; in addition, the booklet has been reviewed by outside consultants. The test data and consultant reviews indicate that ethnic groups were portrayed fairly and without stereotyping.

The TV spot has been broadcast in a five-State area where local television stations were highly receptive and showed it frequently.

To date, the spot has not been used by local groups independent of Southwest Educational Development Laboratory.

RD 050 042

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Joyce Evans, Acting Program Director

AVAILABILITY

The TV spot exists in predistribution form only; no copies are available for distribution at this time.

Individual copies of the booklet are available upon request from SEDL.

TV spot announcements and printed support materials on other basic parenting topics are under development. The first spot, *Read to Your Child*, will be available in November 1975 (copyright pending). Order from:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 043

CHILDREN'S FRIENDSHIPS IN SCHOOL SETTINGS

Existing research on children's friendships in nursery and elementary school settings

This paper synthesizes research on children's friendship (in nursery and elementary school settings) and has implications for teachers and early childhood personnel. The influence of school environment on friendships, stereotypes affecting children's friendships, and the development of social skills affecting peer acceptance are among the topics discussed. The paper concludes with a discussion of methods (such as shaping, modeling, and coaching) by which children can be taught appropriate social skills to help them in making friends.

SUBJECT AREA(S)

Subject areas discussed in this paper include: Development of social competence in elementary and preschool children; school environment; communication skills; factors involved in peer popularity; management of conflict and aggression; and teaching methods (shaping, modeling, and coaching).

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teachers and aides in early childhood programs and in elementary schools. It will also be of interest to researchers and trainers of teachers and early childhood personnel.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to review existing research on children's friendships in nursery and elementary school settings and suggest ways in which children can be taught appropriate social skills for making friends.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Steven R. Asher, Author
Sherri L. Oden, Author
John M. Gottman, Author

AVAILABILITY

Order No. ED 099 116, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from (in press):
Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Dr.
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 044

COGNITIVE DEVELOPMENT IN YOUNG CHILDREN: A REPORT TO TEACHERS

A review of psychological research on cognitive development in children from ages 3 to 8 with suggestions to teachers on how to apply the research findings

A brief (approximately 100-page) review of the current psychological research on cognitive development in 3- to 8-year-old children has been prepared in a format which makes this information accessible and comprehensible to teachers. Basic research findings are tied to specific suggestions for classroom practices, so that the relevance of the psychological research is clearly apparent to the reader.

Topics covered in the report include attention and discrimination, memory, language, and logical thinking in young children. Each major chapter is introduced by a recommendations digest which summarizes suggested teaching techniques and the research rationales on which they are based. Extensive references document the arguments of the report. References which are of special interest to teachers are marked so that they can be readily identified by those who wish to read further in particular areas.

The report is designed to serve as a reference for individual classroom teachers, as well as a focal point for group discussion in formal or informal teacher training situations.

SUBJECT AREA(S)

Psychological research literature on cognitive development in 3- to 8-year-old children is reviewed and integrated with practical suggestions for teaching techniques consistent with the research findings. The major research areas covered are attention and discrimination, memory, language, and logical thinking. The suggestions derived from the research findings have relevance for all types of classroom activities.

INTENDED USERS AND BENEFICIARIES

The potential audience for this report includes practicing preschool, kindergarten, and early elementary school teachers; teachers in training; and teachers supervising other teachers or classroom aides and volunteers.

The report is brief and direct enough to be used by busy teachers who have little time for outside reading. It is suitable for many graduates of 2-year associate degree programs, as well as for teachers with more extensive training.

GOAL(S) OR PURPOSE(S)

The purposes of this program are: (1) To provide teachers of 3- to 8-year-old children with a coherent understanding of current psychological knowledge about young children's thinking and language, (2) to suggest teaching techniques consistent with psychological research findings, and (3) to provide extensive references for further reading in particular subject areas.

PATTERNS OF USE

The report may be used independently by individual classroom teachers, but it is also well suited for use in informal or formal group sessions.

Preliminary audience reactions to the report indicate that it can provide a stimulating focus for discussion during inservice training sessions. It may also serve as a text in academic courses, perhaps in conjunction with other texts covering specific areas. The report was prepared jointly with a similar report, *Social Development in Young Children: A Report for Teachers.* The two books, which share similar goals and formats, can be used together to cover a broader range of psychological findings concerning children's development.

Recommendations digests which introduce each major section of the report have been designed as summaries of the major psychological points made in each section and the specific teaching techniques which are consistent with the psychological findings. These digests can be used as quick reference guides and may be particularly valuable for training classroom personnel who are not comfortable with large amounts of written material.

TIME REQUIREMENTS

Most teachers could carefully read through the report in 3 to 4 hours. A preliminary skimming of the recommendations digests could be accomplished in 1/2 hour or less.

MATERIALS AND EQUIPMENT

Copies of the reports will be available from the Government Printing Office. The cost per copy has not been established at this writing.

ASSURANCES AND CLAIMS

The preparation of this report was guided by a desire to preserve a cautious and moderate perspective on new research and theories in order to minimize the dangers of premature application of incompletely tested psychological conclusions.

The teaching techniques suggested in the report are not given with any guarantees of effectiveness, although some have been used successfully in research situations or in innovative educational programs. In general, the suggested techniques are procedures which are consistent with whichever techniques the teacher is already using. No great revolutions in technique are proposed. Rather, the report lists many specific strategies which teachers might try using in order to adapt their instruction to the capacities and propensities of young children.

A preliminary draft of the report was read and discussed by 25 practicing preschool and early elementary school teachers. All groups found something of value in the report, although certain sections were more relevant to some groups of teachers than to others.

The teachers' written reactions to the report indicate that, as a whole, they found it useful in broadening their awareness of recent psychological research, suggesting new techniques based on that research, and reminding them of principles and techniques they had forgotten. The report was carefully edited to eliminate potential biases related to gender, racial, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

**Developmental Psychology Laboratory NI-25
University of Washington
Seattle, Wash. 98195**

**Nancy E. Jackson, Author
Halbert B. Robinson, Author
Philip S. Dale, Author**

AVAILABILITY

***Cognitive Development in Young Children: A Report for Teachers* has been submitted to the National Institute of Education for publication and dissemination.**

INFORMATION CURRENT AS OF MARCH 1975 ■

A COLLECTION OF PAPERS FOR TEACHERS

Four papers on selected issues in early childhood education

This collection of four papers focuses on selected issues in early childhood education. The first paper, "The Advisory Approach to Inservice Training," presents the highlights of a year's experience with the advisory (onsite consultant) approach to the inservice education of elementary school teachers. A major objective of this pilot study was to be able to answer questions about what it is like to be an adviser, which problems arise in the course of using this approach, and how an advisory system should be designed. The second paper, "Developmental Stages of Preschool Teachers," suggests four dimensions of training for preschool teachers: (1) Developmental stages of the teacher, (2) training needs of each stage, (3) location of the training, and (4) timing of training. In the third paper, "The Enabling Model for Early Childhood Programs," the broad dimensions of the *Enabler Model* have been outlined. Rather than offering a community a predesigned experimental curriculum, the *Enabler Model* provides regular onsite support and guidance to assist local communities in the formulation and implementation of their own preschool programs. The last paper, "Condition With Caution," provides a paradigm in terms of phenotype and genotype for the consideration of contrasting explanations of behavior.

SUBJECT AREA(S)

Subjects included in this collection of papers are: Program development in early childhood education, inservice teacher education programs, teacher guidance and teacher role, classroom behavior, and professional teacher development.

INTENDED USERS AND BENEFICIARIES

The program is designed for preschool teachers child caregivers, teacher trainers, and administrators.

GOAL(S) OR PURPOSE(S)

The goal of this program is to provide topical papers on information of interest to teacher trainers and teachers.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Lilian Katz, Author

AVAILABILITY

Order No. ED 088 592, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 046

A COMPARISON OF PROVISIONS IN STATE AND FEDERAL STANDARDS FOR INSTITUTIONAL DAY CARE

A comparison of State provisions for institutional day care

Program designers, developers, and policymakers often need access to comparative information about the standards for day care in the various States. One problem with standards for day care is that they typically fall under more than one agency of State government. Often standards conflict, and agency responsibility overlaps in some areas and is nonexistent or ambiguous in others. As a consequence, the National Program on Early Childhood Education undertook to collect the applicable standards covering institutional day care and to prepare a report comparing provisions across the various States. The report also includes a universal checklist of items which must be considered in setting up a day care program. In all, the standards of 44 States are included in the report. The responses received from the remaining six States indicated that their guidelines were presently unavailable or were in the process of being revised.

The variables for classifying the guidelines were developed by selecting standards from a sample of six States. The foremost consideration for selecting these States was the quantity of items or standards rather than the quality of their guidelines. States with fewer listings of standards but with new ideas or new outlooks on old ideas were examined and also added to the list of variables. This technique led to a large list of statements.

Ten principal variables were identified: Health, nutrition, fire and safety standards, staff requirements, records, parent involvement, sanitation, equipment, physical facilities, and curriculum. Each of these major categories contained a number of discrete subcategories. The subcategories were defined by lists of items. For ease of documentation, these items were formulated into statements to which "yes," "no," or "no provisions" could be responded. Charts were prepared showing how each of the States' standards related to the items in the universal set. Each chart, therefore, gives an overall visual impression of the way each item is treated in each of the States. The review of standards was completed in 1972 and could be updated; however, it still serves as a useful document of the kinds of program considerations developers must make in order to design models for national replication.

SUBJECT AREA(S)

The subject area is early childhood education; specifically, regulations and guidelines for developing and operating institutional day care in the various States.

INTENDED USERS AND BENEFICIARIES

Program developers, day care operators, and education policymakers are the intended users.

GOAL(S) OR PURPOSE(S)

The goals are to make available, in concise form, the comparative provisions for institutional day care in the various States and to provide a research, information, and reference tool needed for development of replicable early childhood program models.

PATTERNS OF USE

The *Comparison of Provisions* might be used by State and Federal agencies, day care franchisers and other policymakers, and planners as a self-contained reference tool.

ASSESSMENT PROVISIONS

No internal assessment provisions of the validity or comprehensiveness of the materials are provided other than the author's assurances of good research practices.

ASSURANCES AND CLAIMS

No reports of harm have been associated with the use of this material. Since the report was completed in 1972 and State guidelines are constantly changing, it is likely that some information contained in the report is not up to date at this time. However, the author's experience in collecting and analyzing information from the States indicates that it would be difficult to keep a constantly updated version of these materials. For this reason, this document may still be useful as a "best effort" in compiling a large amount of disparate information into concise form.

RD 050 046

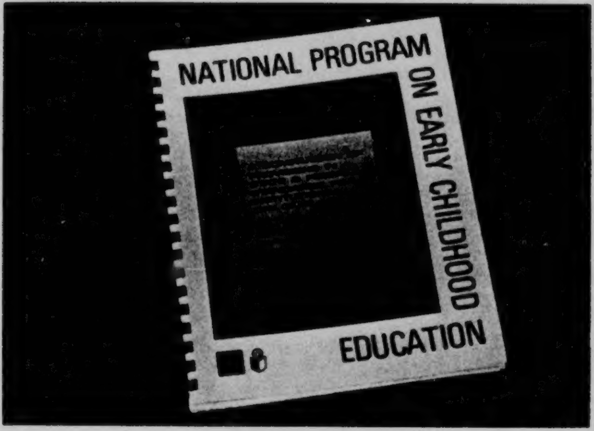
DEVELOPER/AUTHOR:

National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harry Kelly, Project Director

AVAILABILITY

The document is complete and carries a 1972 copyright, but multiple printed copies are no longer available at this time.


NATIONAL PROGRAM
ON EARLY CHILDHOOD
EDUCATION

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 047

A CROSSCULTURAL ANALYSIS OF THE CHILD CARE SYSTEM

An overview of child-care systems in the United States, Sweden, Israel, and China

This overview of the structure and operation of child-care systems in four societies (United States, Sweden, Israel, and China) focuses on the child, the parents, the child-care workers, the Government, and private industry. Child care in each of these societies is discussed in terms of individual or group orientation; degree of diffusion of responsibility for children; and contribution of children to group, community, and/or larger society goals. The paper is based on cross-cultural research on childhood socialization; interviews with educators and Government officials; a collection of statistical data and research reports; and visits to day-care centers, schools, and playgrounds.

SUBJECT AREA(S)

Subjects discussed in this paper include: Cross-cultural studies; child-care practices; roles of child, parent, and Government in society; nursery schools and day-care services; mother attitudes toward child care; and child-care workers and training.

INTENDED USERS AND BENEFICIARIES

This overview is intended primarily for persons responsible for planning, implementing, and evaluating child-care programs and services. It is also of interest to social workers, community planners, and researchers.

GOAL(S) OR PURPOSE(S)

To broaden the perspective of directors of child-care programs and services (at National, State, and local levels) by describing alternative ways societies provide for child care and early education.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Sarane Spence Boocock, Author

AVAILABILITY

Order from:
ERIC Document Reproduction Service
Computer Microfilm International Corporation
P.O. Box 190
Arlington, Va. 22210

***Current Topics in Early Childhood Education* (in press):**
Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Drive
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

DAY CARE: AN ABSTRACT BIBLIOGRAPHY
(SUPPLEMENT NO. 1)

A bibliography of documented abstracts of materials in the ERIC system that relate to day care programs

This updated abstract bibliography includes document abstracts from *Research in Education* and citations of journal articles in *Current Index to Journals in Education* from 1969 to 1971. The topics include: Family day care, day-care centers, child development, staff, standards, administration, equipment, parent participation, health services, physical environment, Federal and State aid, and methods of evaluation.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert day-care teachers and policymakers to materials in the ERIC system related to day-care programs and services. It is also pertinent to researchers, trainers of child-care personnel, program consultants, and students.

GOAL(S) OR PURPOSE(S)

The purpose of this bibliography is to provide a useful list of references on current research studies, day-care programs and services, and standards and legislation in response to a growing number of requests for information on day care.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

Order No. ED 069 402, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:
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P.O. Box 190
Arlington, Va. 22210

Copies are also available for $0.95 from the developer.
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 049

DISCIPLINE AND BEHAVIOR: AN ABSTRACT BIBLIOGRAPHY

A bibliography of ERIC documents on discipline and behavior modification

This selective bibliography contains references to ERIC documents on discipline and behavior modification of young children. Specific topics include teacher and parent behavior, and classroom practice as related to child behavior and discipline. The citations are divided into five sections: (1) Regular classroom, (2) teacher training and teaching techniques, (3) exceptional child, (4) family, and (5) general. Entries were taken from *Research in Education* (RIE), April 1971 through November 1973, and from *Current Index to Journals in Education* (CIJE), January 1972 through November 1973.

Subject areas of documents cited in this bibliography include. Child discipline in the classroom and at home, effects of adult-child relationships on behavior, behavior modification and positive reinforcement, teacher training and teaching techniques, and behavior problems related to the exceptional child.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert teachers and parents to materials in the ERIC system related to discipline and behavior. This publication would also be of interest to administrators, social workers, psychologists, and researchers.

GOAL(S) OR PURPOSE(S)

The purpose is to provide a current listing of research reports, guides, and articles in response to requests for information on discipline and behavior.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

Order No. ED 092 243, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $1.50; order catalog No. 108.
Publications Office/IREC
University of Illinois/College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

RD 050 050

EARLY CHILDHOOD EDUCATION PROGRAM AND RESEARCH SUPPORT LITERATURE: A STATE OF THE ART REVIEW

A comparison of the results of 19 early childhood programs of the 1960's

The 1960's was an especially active time for the development of early education programs. James O. Miller's report describes the historical and intellectual background of these programs, and it attempts to describe briefly the comparative results achieved by different intervention programs. Miller also presents practical recommendations for subsequent program development from his extensive survey of available programs. The object of the review is to make available the findings, program foundations, and materials which have emanated from these models. Miller found that the early 1960's development of programs in early education was continued and was refined in the latter part of the decade. However, additional programs did not develop as fast after 1968.

The survey contains descriptions of 19 early childhood programs. Each program is discussed according to categories, program foundations, instructional system, delivery, evaluation, installation and maintenance support systems, and recommendations. Miller is former head of the National Laboratory on Early Childhood Education. Miller's information on a great variety of programs is compiled for both the general reader and the researcher.

SUBJECT AREA(S)

Early childhood education: Catalog of replicable models and Literature Survey.

Resumes of model early childhood programs are provided for easy reference and comparison.

INTENDED USERS AND BENEFICIARIES

The intended users are early childhood education researchers, planners and program administrators, and developers.

GOAL(S) OR PURPOSE(S)

The major goal is to provide easy access to the results of educational research and development on early childhood models during the 1960's.

PATTERNS OF USE

The survey is a self-contained book.

ASSURANCES AND CLAIMS

The survey used the following criteria to select programs: (1) The program was developed for preprimary children, ages 3-5, (2) the program had an education component, (3) available literature on the program would support replication, (4) the program is considered "successful" by the developer, (5) "success" is demonstrated in formal reports, and (6) the program was implemented in the 1960's.

An extensive literature search was conducted, and a bibliography of relevant materials was compiled. No reports of intellectual, social, or sexual bias have been received from the survey. The author has made every effort to be careful and conclusive in program presentation of facts and qualification of results. Because the author was dependent upon published materials, it must be cautioned that the survey cannot include all programs implemented in the late 1960's.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Early Childhood Education Program and Research Support Literature: A State of the Art Review	1	10.00		

DEVELOPER/AUTHOR:

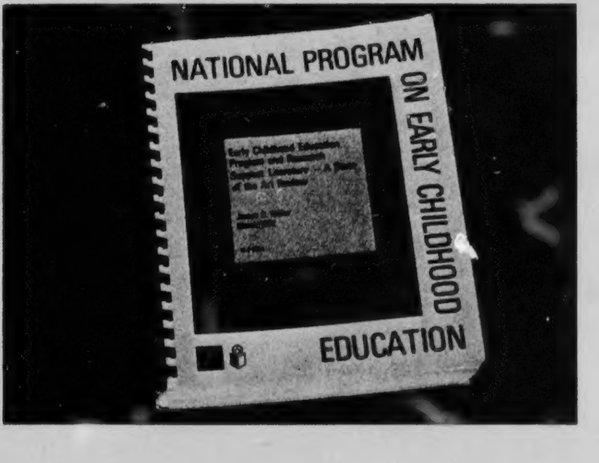
National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Thomas Johnson, Project Director
James O. Miller, Product Developer

AVAILABILITY

Early Childhood Education Program and Research Support Literature: A State of the Art Review is available at a cost of $1.10 per copy. Order from:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF FEBRUARY 1975 ■

EARLY CHILDHOOD INFORMATION UNIT

A multimedia information unit that informs decisionmakers of alternative early childhood educational models for grades pre-K to 3

The *Early Childhood Information Unit* is designed for teachers, administrators, parents, and community people who have the responsibility of reviewing, selecting, and implementing early childhood programs. The unit is developed to inform these decisionmakers about innovative alternatives in the education of young children from preschool through the 3d grade. The unit does not recommend any one program; decisions regarding adoption/adaptation of programs should be made by the local school community in light of local constraints, conditions, and resources. This multimedia information unit contains the following five items.

1. "Reviews of Trends in Early Childhood Education"—This document traces influences in the development of modern approaches to early childhood education.
2. Audiovisual briefings—Each briefing consists of one filmstrip and one audiotape: (a) An introductory briefing, which provides a context for the audiovisual briefings on individual programs and covers some of the major areas in which programs may differ and what to look for in the program briefings; (b) program briefings, each of which is designed to show how the program is carried out in one classroom.
3. Program reports—There is a 20- to 35-page comprehensive report on each of the 8 major programs which contain detailed information on goals and objectives, content and materials, classroom activities, parent involvement, professional and paraprofessional training, administrative requirements and costs, program development and evaluation, and the history of the program.
4. Program summaries—There is a 3- to 6-page summary of each of seven additional programs deserving of the user's consideration.
5. A selected bibliography.

SUBJECT AREA(S)

The subject area is early childhood education.

INTENDED USERS AND BENEFICIARIES

The intended users are school administrators, teachers, and parents concerned with reviewing alternative early childhood models for adoption.

GOAL(S) OR PURPOSE(S)

The purpose is to inform decisionmakers in early childhood education about alternative models.

PATTERNS OF USE

Users are encouraged to follow the review procedure; (1) Review the introductory film, (2) read program summaries, (3) discuss the relevance of programs to local needs, (4) review program briefing, (5) read program report, and (6) discuss and determine the appropriate program to meet local needs.

TIME REQUIREMENTS

Three or four sessions of 1 and 1-1/2 hours each are required.

ASSURANCES AND CLAIMS

The product has been tested with approximately 150 teachers and administrators in early childhood education. Data substantiate claims of knowledge gains and value of the unit.

RD 050 051

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Early Childhood Information Unit	1 copy per learner	88.50	When worn	Educational Products Information Exchange Institute, 463 West St., New York, N.Y. 10014

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Stanley H.L. Chow, Senior Developer

AVAILABILITY

The unit will be available in fall 1972.
Education Products Information Exchange Institute
463 West St.
New York, N.Y. 10014

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 052

EARLY CHILDHOOD NEWSLETTERS: A SELECTED GUIDE

A comprehensive listing of early childhood newsletters, journals, and magazines

This document presents a guide to newsletters and other serial publications concerned with topics of interest to educators and researchers working with young children. The guide is divided into three main areas: (1) General early childhood newsletters; (2) special interest newsletters, including newsletters on such topics as bilingual/biracial education, legislative developments, open education, parent education/involvement, special projects, television, and educational trends; and (3) selected journals and magazines. Each newsletter listing contains the title of publication, scope note, price, frequency of publication, approximate number of pages per issue, and ordering address. The same information, except for scope notes and number of pages, is provided for the journals and magazines.

INTENDED USERS AND BENEFICIARIES

This publication was compiled to provide a comprehensive listing of news sources for teachers, teacher trainers, and researchers involved in preschool, kindergarten, and elementary school education.

GOAL(S) OR PURPOSE(S)

The goal of this publication is to make easily available a useful list of early childhood information sources.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Anne E. Stakelon, Compiler

AVAILABILITY

Order No. ED 089 883, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
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P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $0.75; order catalog No. 106.
Publications Office/IREC
University of Illinois/College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 053

EARLY CHILDHOOD RESEARCH: SECOND THOUGHTS AND NEXT STEPS

An overview of early childhood research for those concerned with future planning

This paper reviews recent early childhood research studies and indicates areas in which research is still needed. Project Head Start has had the effect of helping developmental psychology to become more comprehensive and less ethnocentric than previously. Developmental psychologists are now studying infants and toddlers, and the preschool child's total functioning. Educational researchers are currently reacting to the apparent failure of public preschool programs to improve the later school achievement of disadvantaged children. The trend will probably be toward a wider range of options concerning types of early education. Developmental research in early education, involving studies of how and when particular skills and content can best be learned, is necessary to create an effective instructional program. Little research has been done on the developmental characteristics of 3- and 4-year-olds, and few instructional programs have recognized the important role fantasy and spontaneous play have in a child's cognitive development. The scope of research in early childhood education needs to be broadened and put into a more comprehensive developmental framework. Researchers might investigate the child, the child's family, the classroom teaching, the teacher role, institutional setting, and research and the researcher.

SUBJECT AREA(S)

Subjects discussed in this paper include developmental psychology, educational research, and preschool programs and preschool learning.

INTENDED USERS AND BENEFICIARIES

This publication was designed for researchers, administrators, and teacher trainers.

GOAL(S) OR PURPOSE(S)

The purpose of this publication is to present an overview of early childhood research to educators concerned with planning future research.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Millie Almy, Author

AVAILABILITY

Order No. ED 071 765, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
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P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

EDUCATION FOR PARENTS OF PRESCHOOLERS: AN ABSTRACT BIBLIOGRAPHY

Bibliography of 108 ERIC documents on parent education and involvement during children's preschool years

This selective bibliography cites 108 ERIC documents on parent education and parent involvement during the child's preschool years. Included are reports from both home-based and center-based programs (such as Home Start and Head Start). Entries are from *Research in Education* (RIE), October 1970 through April 1974, and from *Current Index to Journals in Education* (CIJE), May 1970 through April 1974.

Subject areas of documents cited in this bibliography include: Parent education, home-based programs and home visiting, parent participation in early childhood education, and parent-child relationship.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert early childhood teachers and administrators to materials in the ERIC system related to various aspects of parent programs. This publication would also be of interest to researchers, teacher trainers, program consultants, and students.

GOAL(S) OR PURPOSE(S)

The goal of this product is to provide a useful list of references on current research studies, program descriptions, and evaluations in response to numerous requests for information on parent education.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

Order No. ED 092 225, $0.76 (microfiche), $4.43 (paper), add $0.18 (postage). Order from:
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College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 055

ISSUES AND PROCEDURES IN TESTING YOUNG CHILDREN: ERIC/TM REPORT 37

A report discussing characteristics of children and the limitations of testing when small children are examined

Anyone who uses tests for educational evaluation must be alert to the kinds of decisions which can be made on the basis of test results. Those who work with children must be aware of both the developmental characteristics of children and the limitations of testing when small children are examined. Tests can be valuable sources of data for decisionmaking. The choice of a test will depend on the type of decision to be made. Decisions involving program planning, program evaluation, screening, and administration may require different kinds of instruments; and different criteria should be used in test selection. Some of the criteria outlined are: Timeliness; efficiency; face, content, discriminant, criterion, and edumetric validity; test reliability; and test bias.

This product discusses cognitive, affective, and psychomotor domains in relation to determining which test characteristics are important for a particular educational decision. Some strategies which offer effective ways to obtain more valid assessment data are presented along with comments on alternative methods of testing. Finally, the product stresses the importance of protecting human rights and the rights of children in testing.

SUBJECT AREA(S)

Evaluation, the selection of tests for programs involving young children, and the use of test data for decisionmaking.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers, school administrators, State and local education agencies, program and project directors, program evaluators, novice researchers, and school board members. Primary beneficiaries are school and program administrators.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To translate research and technical information so that it can be applied by practitioners and (2) to present a basic overview of the major issues and problems in testing young children.

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of measurement experts for review. The authors then incorporated their comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

Robert H. Bradley, Author
Bettye M. Caldwell, Author

AVAILABILITY

Issues and Procedures in Testing Young Children was published in December 1974. The report is not copyrighted. Copies are available without charge from ERIC/TM as long as supplies last. A microfiche copy ($0.75) and a paper copy ($1.50) are available from EDRS. Request document No. TM 004 509.

Order from:
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Educational Testing Service
Princeton, N.J. 08540

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INFORMATION CURRENT AS OF MARCH 1975 ■

DISCUSSION GUIDE FOR PARENT GROUPS, BASED ON 58 CHILD DEVELOPMENTAL COMPETENCIES FOR USE WITH HOME-ORIENTED PRESCHOOL PROGRAMS

Two resource documents, a parent guide and a parent coordinator guide, to increase parent effectiveness in fostering learning and development in their preschool children

The *Discussion Guide for Parent Groups* is two resource documents for home-oriented, early childhood education programs: *Parent Coordinator Guide* and a *Parent Guide*. It has as its aims: (1) To assist parents in organizing and operating regular parent meetings that focus on their young children's learning and development; (2) to provide professionally sound perspectives on issues that relate to young children; e.g., health, discipline, nutrition, growth and development of the child, childrearing, interests of the adult and child, parents' roles, budgeting family money, understanding child's play, concepts, and community resources; and (3) to motivate the parent to participate in the parent group by providing for the parent's own needs through interesting adult crafts and activities. Some meetings will be primarily discussion among parents, and others will use guest resource persons such as physicians, special educators, and nutritionists. Social times and business activities are provided for in the guide. Perspectives on issues that relate to young children are structured on the basis of 58 child developmental competencies to direct parental attention to the range of developmental issues which they may encounter and to alert them to developmental progressions.

The materials were developed in recognition of the recent dramatic increase in programs emphasizing parents' involvement in their children's learning and development. A survey revealed the need for materials that were empirically based and oriented to having parents take an active role as the child's teacher. It is recognized that the parent group can play a vital role in early childhood programs, particularly when coupled with specific training of the individual parents to work with their own children.

The *Parent Coordinator Guide* is used by a professional to assist parent groups in organization and operation. Although the coordinator may need to help start groups, the coordinator does not operate the groups; the parents do. The *Parent Guide* explains to parents the importance of their participation in their child's learning and provides suggestions for the conduct of parent meetings. Both guides contain a common group of materials on field trips, activities, possible topics for parent meetings, and adult crafts.

SUBJECT AREA(S)

Subject areas include early childhood development and its promotion through parent involvement.

INTENDED USERS AND BENEFICIARIES

The intended users are parents of children in home-oriented preschool education.

GOAL(S) OR PURPOSE(S)

The purpose of the guides is to enhance the parent's effectiveness as the child's teacher by creating a parent group which provides the parent with a sounding board, mutual support, and information about the young child.

PATTERNS OF USE

Several patterns of group organization are considered. A paraprofessional home visitor may serve as leader, parents may elect leaders or have a rotating leadership, or a professional's services may be engaged.

ASSESSMENT PROVISIONS

Assessment provisions are not provided. These should be developed during 1976 if the necessary support is provided.

TIME REQUIREMENTS

Meetings may be weekly, biweekly, or monthly, usually for about 1-1/2 hours.

IMPLEMENTATION PROCEDURES

A professional coordinator is required to service the parent groups in a region. This person will normally have other responsibilities in a home-oriented effort in addition to these. Meetings may be held in the neighborhood school

RD 050 056

or other available spaces. It is important to find a "neutral location" in the community.

Personnel Required for Product Adoption and Implementation

One professional parent group coordinator is required for a large county school system. This will normally be a master's level person, skilled in interpersonal processes, child development, and administration.

ASSURANCES AND CLAIMS

Assurances and claims cannot be made until the materials are field tested. All reasonable efforts have been made to design these products to be physically and psychologically harmless and without sex, racial, or other social bias. They will be ready by 1976 and tested if support is provided.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent coordinator guide	1 per coordinator	*	Indefinite	
Parent guide	1 per family	*	Indefinite	

*Currently in development and production; cost not estimated.

DEVELOPER/AUTHOR:

Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

Prototype versions will be available in November 1975.
For further information, contact:
Marketable Preschool Education Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 057

HEAD START AND FOLLOW THROUGH, 1972-1974: AN ERIC ABSTRACT BIBLIOGRAPHY

A bibliography of 123 ERIC documents on the Head Start and Follow Through programs

This selective abstract bibliography cites 123 recent ERIC documents about Project Head Start and Project Follow Through. Included are reports of research, evaluation, and program descriptions. Entries were taken from *Research in Education* (RIE) and from *Current Index to Journals in Education* (CIJE), January 1972 through August 1974. The bibliography is divided into three sections: Head Start, Head Start Test Collection, and Follow Through.

SUBJECT AREA(S)

Subject areas of documents cited in this bibliography include: (1) Federal program descriptions and program evaluation, (2) measurement instruments and preschool tests, (3) intervention programs for young children, and (4) child development and parent participation.

INTENDED USERS AND BENEFICIARIES

This bibliography was compiled to alert policymakers, child care center directors, teachers, and researchers to materials in the ERIC system related to the development and progress of Federal compensatory education programs for young children.

GOAL(S) OR PURPOSE(S)

The goal of this bibliography is to provide references to recent programs, research, evaluation reports, and measurement instruments related to Projects Head Start and Follow Through.

DEVELOPER/AUTHOR:

**ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801**

Judith Lutsky, Compiler

AVAILABILITY

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805 West Pennsylvania Ave.
Urbana, Ill. 61801**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 058

INFANT EDUCATION AND STIMULATION (BIRTH TO 3 YEARS): A BIBLIOGRAPHY

A bibliography of research reports on infant education and stimulation

This extensive bibliography provides references to programs and persons responsible for shaping ideas and practices relating to infant stimulation, education, and assessment of such efforts. The references are divided into six topics: (1) Curriculums for infant education programs; (2) materials for the education and training of caregivers and teachers of infants; (3) descriptions and research reports of infant stimulation and education projects or experiments; (4) monitoring infant development and education projects—testing and evaluation; (5) infant care and development references useful for background knowledge on infant care and education; and (6) equipment, health, and environmental characteristics and standards for infant-care settings.

SUBJECT AREA(S)

The subject areas of documents cited in this bibliography include: Infants; infant stimulation; training of child-care workers; and standards, evaluation, curriculum, and equipment for infant programs.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert directors of infant and toddler programs, teacher trainers, and teachers to materials concerning infant care and stimulation. It also would be of interest to researchers, program consultants, psychologists and social workers, and parents.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to provide a bibliography of research reports and articles on infant education and stimulation.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Alice S. Honig, Compiler

AVAILABILITY

Order No. ED 081 499, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:

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Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

CURRENT RESEARCH AND PERSPECTIVES IN OPEN EDUCATION

A publication of selected presentations of a National Conference on Open Education

This document stimulates further study of open education. The publication is an edited version of selected presentations and panels of the American Association of Elementary-Kindergarten-Nursery Educators' National Research Conference on Open Education. Conference papers include the following: "Current Research in Open Informal Education," "Search and Research," "Research and Assessment Strategy," "Open Education and Internal Locus of Control," and "Practical Applications of Research." Two additional papers presented by the directors of the ERIC Clearinghouse on Teacher Education and the ERIC Clearinghouse on Early Childhood Education concern problems and issues in research on open education and preparing educational personnel for open schools.

SUBJECT AREA(S)

Subject area is recent research on open education.

INTENDED USERS AND BENEFICIARIES

This document will be of value to the entire educational community concerned with the improvement of education by practicing the open education concept. The publication has a potentiality for moving people toward further research and experimentation to find ways to attain the potentialities of the concept.

GOAL(S) OR PURPOSE(S)

The document serves to provide a broad perspective on open education research. and to highlight the strengths of the open education concept and provide some thoughtful reservations.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

D. Dwain Hearn, Author
Joel Burdin, Author
Lilian Katz, Author

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 060

MOVEMENT EDUCATION FOR PRESCHOOL PROGRAMS (NATIONAL PROGRAM ON EARLY CHILDHOOD EDUCATION)

An illustrated discussion of physical exercise needs of preschool children

The need to develop inschool programs of movement education for young children is described in this nontechnical and thoroughly illustrated book. The book is intended for teachers, parents, and the general public. It discusses the value and variety of movement experiences and the importance of fostering them throughout life. Many photographs of children using their bodies in various ways add significantly to the text. The normal child's movement needs are explored and identified. Some requirements for an instructional program which will meet these needs are suggested.

The book was intended to be one component of a movement education curriculum to include activities, teacher training, resource materials, and recordkeeping procedures. However, funding for the project was phased out before development was complete.

SUBJECT AREA(S)

The subject area is early childhood education; specifically program rationale and guidelines.

INTENDED USERS AND BENEFICIARIES

Teachers and parents of preschool children and the general public are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of this book is to bring about greater awareness of the need for programs to promote movement education for normal preschool children.

PATTERNS OF USE

This product is a self-contained book of information which may be read and applied in almost any everyday situation.

TIME REQUIREMENTS

Approximately 1 hour of reading time is required.

ASSURANCES AND CLAIMS

CEMREL, Inc., has received no reports of harm resulting from the use of these materials. The authors have attempted to be fair and unbiased in presenting their ideas. The rationale for a movement education program was based upon surveys of available curriculum materials and upon the experience of the product developers in teaching movement and movement theory to children and adults. The product developers all taught at the Movement Behavior Laboratory at the University of California, Los Angeles. It was concluded that a preschool movement program based on the basic phenomena of force, space, and time and set in a context that would introduce movement experiences through play would contribute significantly to a field dominated (when planned experiences are introduced at all) by physical development games or creative expressiveness through dance. Program development was begun to meet this identified need, but funds were phased out before testing, evaluation, and revision could be completed. Therefore, the primary claim was made for this rationale is that is articulates a need still unmet in early childhood education.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Movement Education for Preschool Programs (book)	1	5.60		

DEVELOPER/AUTHOR:

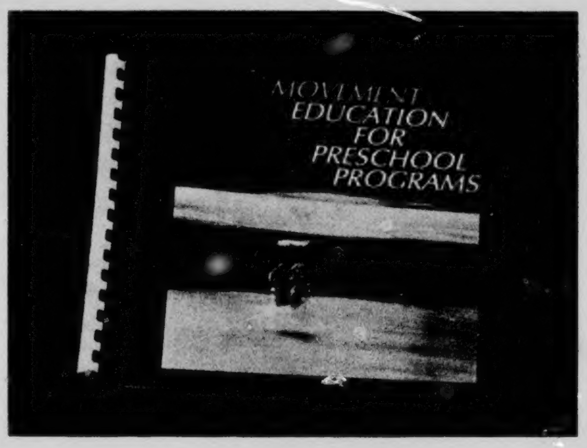
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harry T. Kelly, Project Director
Valerie Hunt, Product Developer
Jeanne Grenzeback, Product Developer
Becky Egle, Product Developer

AVAILABILITY

The product carries a 1972 copyright. *Movement Education for Preschool Programs* is currently available from:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 061

NEW DIRECTIONS FOR EARLY CHILD DEVELOPMENT PROGRAMS: SOME FINDINGS FROM RESEARCH

An overview of preschool studies and programs of the 1960's

Information on the preschool years, which has emerged from the pioneering studies and programs of the 1960's, is reviewed and interpreted with regard to implications for current and future policy. Limitations of knowledge in this area are noted and attributed to inadequacies in the related research. Four general findings are reviewed and discussed:

1. The importance of the first 6 years of life incorporates research on prenatal development and infants' motor, cognitive, and linguistic abilities.
2. There exists a diverse technology for teaching families of young children. Included are an overview of experimental programs concerned with cognitive development and school achievement, a review of the Head Start literature, and a tentative comparison of the relative effectiveness of different approaches to early experience derived from the Planned Variation Study.
3. Continuity of human development is vital to maximize program effects. Methods are suggested that might provide continuity between preschool and primary school experiences.
4. The importance of multiple influences on children is reaffirmed. There is a need for alternatives that strengthen the family as the primary childrearing agent, instead of encouraging families to place their children in day care.

Subjects discussed in this paper include: early experience and preschool programs; research on preschool learning, cognitive and motor development; compensatory education; home visits and parenthood education; family and special influence on young children; and educational innovation.

INTENDED USERS AND BENEFICIARIES

This program is designed for educators, administrators, and policymakers responsible for planning and implementing early childhood programs. It is also of interest to teachers and other personnel involved in these programs.

GOAL(S) OR PURPOSE(S)

The purpose of this program is to present an overview of what has been learned from the experimental studies and programs of the 1960's and to suggest directions for early childhood programs in future years.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Lois-ellin Datta, Author

AVAILABILITY

Order No. ED 081 501, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:

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P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 062

NINE MODEL PROGRAMS FOR YOUNG CHILDREN

A two-volume survey of nine model preschool programs

This two-volume information survey provides descriptions and sample materials on nine preschool programs. The book can be used by day care implementers and other school decisionmakers to decide which programs are most applicable to their needs, teaching philosophy, and situation. Five types of programs are surveyed: Open classroom, bilingual, structured classroom, individualized, and noninstitutional.

Each model program is discussed in terms of its basic philosophy, instructional system, installation and maintenance systems, and evaluation. The criteria for selecting programs for the survey were that they be well defined, easily transportable, within reasonable economic reach, and consistent in attaining positive educational goals. Also, programs were selected from categories that would illustrate the current diversity of educational approaches. The programs chosen are for 4- to 6-year-old children, although particular programs might extend above or below this general age group. The choice of population was intended deliberately to span the preschool and early elementary years because it was felt that local initiative could be encouraged and institutional innovation simultaneously fostered by focusing on programs that could be applied either by interested community groups or through the more formal channels of the educational system.

Nearly all the programs surveyed were disseminated as part of the national Follow Through Program. The programs included are: Tucson Early Education Model, Education Development Center Approach, Bilingual Early Childhood Program (Southwest Educational Development Laboratory), The Oral Language Program (Southwestern Cooperative Educational Laboratory), The DARCEE/NPECE Preschool Program, The Behavior Analysis Plan, The Responsive Model Program, The Primary Education Project, and The Florida Parent Education Approach.

SUBJECT AREA(S)

The subject area is early childhood education; specifically, a literature survey of available program models.

INTENDED USERS AND BENEFICIARIES

The intended users are day care implementers, school administrators, community groups, and teachers interested in choosing among available early education models.

GOAL(S) OR PURPOSE(S)

The major goal is to provide a tool by which school decisionmakers can make informed choices among early education programs and can choose programs (or a variety of programs) based on the educational philosophies, physical requirements, materials, and costs inherent in them.

PATTERNS OF USE

The program is printed in two volumes. The first volume contains program résumés and comparative information. The second volume includes samples of lessons and other actual classroom materials typical of each program reviewed. The two volumes are a self-contained information resource for selecting and evaluating sample programs.

ASSURANCES AND CLAIMS

The developers have not received any reports of harm associated with the use of this product. Programs selected for review were largely those developed out of the Follow Through Program and were, therefore, required to meet all Federal standards of fairness, social equality, and effectiveness during their development and installation.

RD 050 062

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Nine Model Programs	1 each			
Volume I		8.00		
Volume II (Appendix)		6.00		

DEVELOPER/AUTHOR:

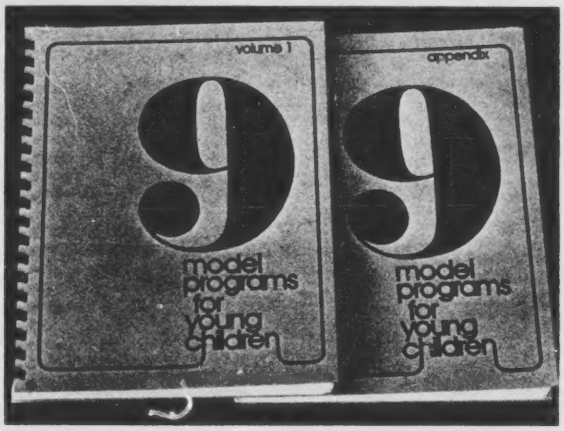
National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harry Kelly, Project Director
Benjamin F. Quillan, Jr., Product Developer
Kathryn S. Rogers, Product Developer

AVAILABILITY

Nine Model Programs for Young Children carries a 1972 copyright. Copies are available from the distributor:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th ST.
St. Louis, Mo. 63139


volume 1
9
model programs for young children
appendix
9
model programs for young children

INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 050 063

NOTES ON THE DISTINCTION BETWEEN EDUCATION AND EXCITEMENT

A comparison of the educational outcomes of alternative teaching methods

This paper suggests that, under the influence of curriculum developers, research and development disseminators, and general cultural influences, teachers of young children too often perceive that part of their role is to keep their children excited (at a high level of responsiveness) or "turned on." This perception can lead to child dependence on and expectation of adult-induced excitement, absence of opportunity for children to learn to engage in sustained work, and teacher reliance on superficial tricks and gimmicks. It is recommended that teachers encourage the children to participate in sustained activities that have more lasting educational value.

Subjects discussed in this paper include: Early childhood educational theories, teaching techniques, teacher role and responsibility, classroom environment, learning activities, and student responses.

INTENDED USERS AND BENEFICIARIES

This paper is designed to make teachers and child caregivers aware of some of the implications of various teaching techniques. Administrators, curriculum developers, and teacher trainers would also find this paper of interest.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to caution early childhood educators about confusing education with excitement, thereby cheating children of opportunities to gain satisfaction from sustained efforts.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Lilian Katz, Author

AVAILABILITY

Order No. ED 076 263, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:

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Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 064

PARENTING MATERIALS INFORMATION CENTER (PMIC)

A system for the collection and dissemination of parenting materials in basic child care practices

The purpose of the *Parenting Materials Information Center* is to gather, analyze, and disseminate information about parenting materials, programs, and resources—both those currently available and those in varying stages of development. Individual items such as books, pamphlets, booklets, films, filmstrips, video tapes, slides, and audiotapes are included as well as sets of materials or total programs which include a variety of individual items.

The program is designed to bridge the gap that exists between the "producers" of parenting materials (often small local projects without access to a distribution network) and the "consumers," parents, and those working with parents in improving parenting skills and knowledge in basic child care practices. Although some materials and program ideas for use in parent training and training of adults who work with children do exist, presently they are scattered, and for the most part, are known and used primarily at the local level—often by the originators at a given community site or school district. Thus, the materials are largely inaccessible. With the increased interest and emphasis on inclusion of parents, particularly parents of young children, in the educational development of their children, the need for information and access about existing materials has increased greatly.

Identifying, collecting, and cataloging of parenting materials, programs, and resources were initiated in February 1974 and are a continuing process. The PMIC uses a process of analysis to provide nonevaluative information about the characteristics of each material included in the collection. This information is recorded on a standard form, which also includes indexing data by means of descriptor terms specifying the content area, age/developmental level, format of materials, target audience, and other characteristics such as language, reading difficulty, and availability.

Intermediate products currently available include a guide to the materials collected, listed alphabetically within format classifications (e.g., books, booklets, programs, and audiovisual materials). The first listing and two supplements have been printed, and guides to the materials collected are being compiled by major content areas. A pilot version of the *User's Handbook and Descriptor Dictionary* has been prepared for developmental purposes only; it is not available for wide distribution.

SUBJECT AREA(S)

Materials are being collected in the following major content areas related to parenting: Preacademic contents, child abuse and neglect, discipline, early childhood activities and play, exceptional children, family, group relations and training, health care and safety education, language and intellectual development, multiethnic/multicultural heritage and contents, parent/school/community involvement, parenting education, physical development, pregnancy and birth, sexual development and education, and social-emotional development.

INTENDED USERS AND BENEFICIARIES

The primary users of the *Information Center* are those working with parents. They include professionals and paraprofessionals in charge of planning and/or conducting parent involvement/parent participation activities. Also included are professionals and paraprofessionals engaged in home-based child-care/child-development programs, as well as parents and professionals and paraprofessionals in the social services (e.g., health, welfare, and adult and career education) who work with self-development of parents as individuals. Other professionals involved in training teachers and paraprofessionals can also use the PMIC to get information about parenting materials. Finally, users will be the parents themselves, for use in their roles as advisers and decisionmakers in programs, as well as for their own personal and family development.

GOAL(S) OR PURPOSE(S)

The overall purpose of the PMIC is to gather, analyze, and disseminate information about parenting materials, programs, and resources. The solution strategy is to develop and research a model which provides personnel from local communities, school districts, and early education programs with: Analytical information about materials, programs, and resources; an information retrieval system to search for specific types of materials contained in the collection; a guide for effective dissemination strategies for information about parenting materials; and documentation on how to set up and maintain the model center.

The intermediate goal is to develop specific products which include alphabetical listings of materials collected and major content area guides which include annotated bibliographies.

PATTERNS OF USE

The products currently available can be used in multiple ways. They can be used: (1) As an informational source of the range of materials currently available, (2) as a detailed guide for purchase of materials, (3) as a nearly complete source for teacher education courses, (4) as supplementary information sources for parenting training workshops, and (5) as a way to identify areas in which materials can be developed to meet special needs.

ASSESSMENT PROVISIONS

Formative evaluation data are being collected on the format and comprehensiveness of the materials compiled. Field data are being collected from individuals using the initial versions, and formative data are being collected on the analysis process and the indexing vocabulary.

When the prototype is established, formative data and feedback will be obtained from actual users in Austin, Texas, and from mail requests from other parts of the country.

A prototype version of the product retrieval system will be in operation by November 1975 using an Optical Coincidence System. Ultimately, this retrieval system will serve as a model to be duplicated and transported as a unit, together with the documentation prepared for the materials collected. In addition to the data base and the retrieval system, a guide to effective dissemination strategies for information about parenting materials will be available.

The current user is any adult who works directly or indirectly with parents of young children. The person reviews the available listings to select the materials that seem most appropriate. Cost and availability information are provided in the listings. Once the prototype is operational, it will be possible for users to state their needs for information in great detail, including content areas, formats, target audiences, age/developmental level, and language and reading difficulty levels.

Once this information is expressed in the indexing language of the system, a listing of the materials in the collection, meeting those requirements, is obtained. With this list, the user can examine the information sheets prepared for each item in the collection. Information sheets contain detailed analytical, nonevaluative data about the materials to assist the user in making decisions about adoption, use, or purchase.

TIME REQUIREMENTS

Time requirements vary in relation to the user's purpose in using the manuals.

IMPLEMENTATION PROCEDURES

No special equipment or facilities, services, or organizations are required for use of current products.

As development of the transportable retrieval system is completed, special equipment, as well as training, will be required. This information is not presently available.

MATERIALS AND EQUIPMENT

No special equipment and/or personnel are required for current products.

As development of the transportable retrieval system is completed, information on materials, equipment, and requirements will be made available.

ASSURANCES AND CLAIMS

No reports have been received indicating that the current products induce any type of harm or include social inequities.

Within the first 3 months of availability of the manual of materials collected, more than 150 copies were distributed to individuals in 36 States.

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Joyce Evans, Acting Program Director
Renato Espinoza, Program Coordinator

AVAILABILITY

Intermediate products for limited distribution are currently available. Prototype will handle limited mail requests and pilot-test users on location and field test by November 1975.

Transportable data base, retrieval system, user's handbook, descriptor dictionary, training materials, formative data, and research-based guides for dissemination are scheduled to be available on July 31, 1976, from:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 065

PSYCHOLOGICAL PERSPECTIVES AND EARLY CHILDHOOD EDUCATION: SOME RELATIONS BETWEEN THEORY AND PRACTICE

Three approaches to psychological programing in early childhood education

This paper delineates some of the central issues confronting psychologists and educators in the application of psychological theory and research to early childhood education. Three approaches to early childhood programing are presented: The behavioristic-learning theory perspective, the Piagetian cognitive-developmental, and the developmental-interaction approach. The differing assumptions on which they are based, the differing ways in which they draw on and utilize psychological concepts, and the ways in which they involve young children in qualitatively different encounters with people, problems, and ideas in the school setting are examined and critically evaluated. The final section of the paper is concerned with a summary statement of the issues arising in the discussion of the three approaches to early childhood education, including a consideration of some of the problems to be considered in evaluating effects of differing modes of education.

SUBJECT AREA(S)

Subject areas of documents cited in this paper include: Educational theories and program descriptions, educational objectives and program evaluation, developmental psychology and psychoeducational processes, and cognitive and social development.

INTENDED USERS AND BENEFICIARIES

This paper is intended primarily for administrators, teachers, teacher trainers, and researchers responsible for implementing and evaluating early childhood education programs.

GOAL(S) OR PURPOSE(S)

To provide background information for teachers and administrators on the relationship of psychological theory and research to practices in education.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 W. Pennsylvania Ave.
Urbana, Ill. 61801

Margery B. Franklin, Author
Barbara Biber, Author

AVAILABILITY

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Arlington, Va. 22210

***Current Topics in Early Childhood Education* (in press)**
Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Dr.
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 066

RESPONSIVE CARE CLASSROOM: SOURCE BOOKS AND A HANDBOOK FOR ADMINISTRATORS

An administrator's handbook and three sourcebooks for running a preschool for children from ages 3 to 6

Responsive Care Classroom is an open-classroom model which emphasizes child-initiated activities in a creative environment. The goal of the program is to increase each child's behavior repertoire by providing options for many activities and by extending children's experiences within the context of self-chosen activities. When a child is immersed in an activity, a teacher observes behavior. The teacher then asks a question, makes a comment or suggestion, or manipulates a material or in some other way participates in the child's activity. While the initial interest is provided by the child, the teacher's intervention helps in finding new approaches or meanings for the experiences.

An essential feature of *Responsive Care Classroom* is its division of space into clearly demarcated areas for large-motor, expressive, and task-oriented activities. The developers believe that a program based on spatial organization, rather than on a time schedule, can better accommodate the varying interests and activity levels of individual children.

Development of the responsive care program was concluded in November 1973, at which time funds were phased out. The materials offered here represent the completed portions of the model at the time development ended.

A series of three sourcebooks was developed which present ideas on how equipment and materials can be used in each of the three spatial areas of the classroom. *I Can Do It* presents activity and equipment suggestions for the active area. *And So There Was Me* describes creative art experiences for the expressive area. *A Space To Discover Me* includes information, organizational principles, and suggested equipment for the task area. Each sourcebook includes not just sample activities but also suggested strategies for responsive teaching.

A completed draft of *A Handbook for Administrators* was written. It includes all the information needed to set up and operate an abbreviated responsive care program. This handbook also includes a sample child assessment record, a list of needed materials, ideas for parent involvement, and staff training materials.

SUBJECT AREA(S)

The subject area is early childhood education; specifically curriculum materials replicable model.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and administrators of day care centers, nursery schools, and kindergarten children, 3-6 years old, in organized care settings.

GOAL(S) OR PURPOSE(S)

The purpose of this handbook is to make available an innovative and valuable alternative to preschool education.

PATTERNS OF USE

The administrator's handbook gives guidelines for running a complete preschool model, adaptable to many children and classroom situations. The three sourcebooks can serve as teachers' handbooks for running the activity areas of the *Responsive Care Classroom*, or they can be used separately to provide activity ideas and teaching strategies in any preschool classroom.

ASSESSMENT PROVISIONS

Although specific testing procedures are not tied into the operation of the responsive care program, the evaluation design included a plan to use several commercial and specifically developed tests.

Recordkeeping is an important part of the responsive care program. Teachers keep individual written records for each child, and they record incidents or statements made by children which indicate the extent of the children's behavior repertoires. These records allow teachers to assess children's progress and to plan needed ways to expand their behavior repertoire into other areas.

IMPLEMENTATION PROCEDURES

Model installation staffs for the responsive care program were to receive intensive training—a 1-week work/training session for the director at an operating responsive care site, a 2- to 3-week preservice session for teachers conducted by the director, and inservice training throughout the first year. Since outside training is not available, directors who wish to implement the abbreviated responsive care program would need to read the administrator's handbook carefully and, from it, plan a 3- to 10-day training session for staff members. Ideas for planning such a training session are included in the administrator's handbook.

ASSURANCES AND CLAIMS

Since the plan to pilot test and evaluate the responsive care program was not carried out, no claims can be made about its replicability. At the development site, teachers and children who used the model appeared to enjoy it and not be negatively affected. Although testing of the model's transportability was not completed, the developers feel that a reasonable approximation of the *Responsive Care Classroom* (an abbreviated version) could be achieved by applying the principles laid out in the administrator's handbook.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
I Can Do It	1	Not determined		
And So There Was Me	1			
A Space To Discover Me	1			
Administrator's handbook				

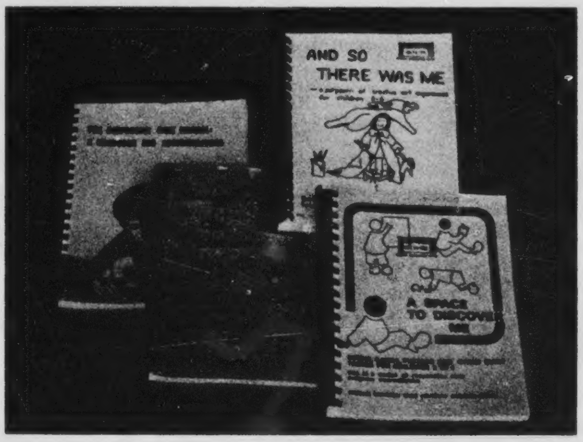
DEVELOPER/AUTHOR:

National Program on Early Childhood Education
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139
Syracuse University
Early Childhood Education Center
Syracuse, N.Y. 13210

Margaret Z. Lay, Project Director, Syracuse
Warren Solomon, Project Director, CEMREL

AVAILABILITY

This handbook exists in prototype form; multiple copies are not available at this time.



INFORMATION CURRENT AS OF MARCH 1975 ■

REVIEW AND INDEX TO TESTS AND MEASUREMENTS FOR EARLY CHILDHOOD EDUCATION

An index and reference of 800 early childhood-assessment tests for children from birth to 8 years

Review and Index to Tests and Measurements for Early Childhood Education is an index and reference list of 800 tests and measurements that can be used with children from birth through the age of 8. The reference list provides the user with summary information about each listing. In addition to the title and acronym of the test or measurement, information about the author, source, cost, publication date, administration time, number of forms, applicable age range, form of administration, key descriptors, reliability, validity, and normative data is supplied for each entry.

All of these individual entries are collected in four indexes. Each provides a different point of entry to permit information retrieval by users with diverse requirements. The indexes include a title index with entries arranged alphabetically, an author index similarly arranged, an age-range index listing entries by their appropriate age for administrators, and an index of descriptors which collects all of the entries under each descriptor.

Coupled with this descriptive listing of individual entries, the review will also provide information on item content and ways of responding to test items. In this two-way classification system, item content refers to what tests intend to measure; for example, a test might measure a child's reactions to a novel situation, or his feeling of self-worth, or his ability to sequence the events of a story in logical order. The index organizes these categories of test content into four "domains" that correspond to four kinds of objectives found in early childhood education programs—the affective, cognitive, psychomotor, and subject matter domains.

The second dimension for classifying items (response methods) refers to the kinds of tasks children must perform as they react to a test item. For example, to measure a child's knowledge of the color red, one test might ask the child to provide the verbal label for this color when shown a red paper; another test might ask the child to select from a group of differently colored papers the one that is red—in this case, with the verbal label supplied by the tester; still another test might ask the child to select from a group of differently colored papers one that is the same color as a paper shown by the tester, with no verbal level being used for the color at all.

The index defines 15 response methods. Using this two-way classification scheme, a profile based on individual items will be available for each entry in the index.

SUBJECT AREA(S)

The subject area is tests and measurements.

This index and reference focuses on early childhood assessment, item classification, and measurement procedures.

INTENDED USERS AND BENEFICIARIES

The *Review and Index to Tests and Measurements for Early Childhood Education* is intended to be used by program developers, evaluators in early education, curriculum supervisors in school districts and in State government, and researchers interested in problems of criterion-referenced assessment.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To provide in a single, conveniently organized source a large number of tests and measurements used in early childhood assessment; (2) to call attention to the variety of assessment procedures which could be used in preschool assessment; and (3) to stimulate the development of new tests which use the full range of response methods relevant to the objective of early education.

ASSURANCES AND CLAIMS

The *Review and Index to Tests and Measurements for Early Childhood Education* is an information source and a research tool. It provides what is probably the most comprehensive single source of available tests and measures in early education. In constructing the index, publisher's catalogs and other published test compilations were reviewed. Augmenting these secondary sources was a search of the specialized listings available at the Test

Collection Library at the Educational Testing Service (ETS).

Researchers at ETS were both encouraging and enthusiastic about the test index. In addition, based on a short article in the CEMREL Newsletter in 1972, CEMREL, Inc., has received more than 250 requests for the published index. From these responses, it is believed that the index would serve a useful purpose for researchers, program designers, teachers, and other persons interested in the field of early childhood education tests and measurements.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Thomas Johnson, Project Director
Paul Owoc, Product Developer

AVAILABILITY

The test listing is complete in draft form. It exists on IBM punch cards, and would require editing and printing to be made available for public use.

A manual to reliably classify item types has been written, but item classification has not begun. Copies of the test index and item classification are not available at this time. The materials that now exist are copyrighted.

INFORMATION CURRENT AS OF MARCH 1975 ■

SELF-CONCEPT: AN ABSTRACT BIBLIOGRAPHY

An annotated bibliography of ERIC documents dealing with development of self-concept in young children

This annotated bibliography cites ERIC documents which deal with the development of self-concept in young children. Entries are from *Research in Education* (RIE), August 1970 through April 1974, and from *Current Index to Journals in Education* (CIJE), April 1970 through March 1974. Topics included are sex differences, socioeconomic status, personality development, parent-child relationships, student-teacher relationship, ethnic groups, racial attitudes, tutorial programs, and special education.

SUBJECT AREA(S)

Subject areas of documents cited in this bibliography include: Children's self-concept and personality development; relationship of sex, socioeconomic status, and race to children's self-esteem; and influence of parents and teachers on children's self-concept.

INTENDED USERS AND BENEFICIARIES

This bibliography was compiled to alert teachers, researchers, psychologists, social workers, and parents to materials in the ERIC system related to the development of children's self-concept and personality.

GOAL(S) OR PURPOSE(S)

To provide a useful list of references on current research and other materials on the development of self-concept in children.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 050 069

WORKING WITH PARENTS IN THE PRIMARY SCHOOL

An annotated bibliography of ERIC documents on parent participation at the primary school level

This selective annotated bibliography cites recent ERIC documents on parent participation at the primary school level. Entries are from *Research in Education* (RIE) and *Current Index to Journals in Education* (CIJE), January 1970 through May 1974. The two major topics reviewed are parent-teacher cooperation for children's education, and parent involvement in decisionmaking in the schools.

SUBJECT AREA(S)

The subject areas of documents cited in this bibliography include: Parent-teacher cooperation, parent participation in the primary and elementary school, parent-teacher conferences, and parent education.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert elementary schoolteachers, administrators, community workers, and parents to materials in the ERIC system on parent participation in decisionmaking in the schools, parent-teacher cooperation, and parent involvement in children's learning.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to provide a useful list of references on existing parent involvment programs and training activities in response to numerous requests for information. This bibliography would help educators and community workers to involve parents and other citizens in children's education, a major thrust of the Elementary and Secondary Education Act.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

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Copies are also available from the developer for $1.60; order catalog No. 112.
Publications Office/IREC
University of Illinois/College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

EDUCATION AND WORK
(CAREER EDUCATION)

Administration and Staff Development
Career Awareness and Exploration
Career Counseling
Work Experience-Based Programs

OVERVIEW

LARRY J. McCLURE
Northwest Regional Educational Laboratory
Portland, Oregon

The issues surrounding the relationship between education and work present a complex picture with many problems and some solutions. Many of the problems reflect a dichotomized culture that separates groups in society one from the other. Although education may illuminate the parallel phenomena of social and professional isolation and separatism existing in society—characterized by the gaps between generations, the lack of communication between labor and management, the isolation of schools from the activities of the community—it cannot, by itself, close the gaps.

Education, however, can do many things to help people in their planning and development of careers. The National Institute of Education's Education and Work Group has identified nine areas where educators can successfully intervene in preparing students for the world of work. Education can help people:

- become more aware of the role of work in their lives and in our economy
- become better informed about the nature and requirements of different occupations, and the education and experience needed to enter and progress in these
- acquire self-knowledge in relation to different occupational futures
- avoid socializing the next generation into limiting occupational stereotypes and overcome self-imposed limitations on career choice due to socialization by others
- improve their ability to make reasonable career decisions and develop career plans that will help them reach their occupational goals insofar as this is possible
- develop the skills, abilities, and attitudes needed to enter and progress in careers
- acquire certification of abilities and skills obtained through formal and nonformal learning experiences
- bring together opportunities for continued education and for work with individuals ready for these opportunities
- insure continued access to the information and education needed for career development throughout life.

This *Catalog* has divided the field of Education and Work (Career Education) into four focal areas: Administration and Staff Development, Career Awareness and Exploration, Career Counseling, and Work-Experience-Based Programs. These areas provide the reader with organizing points rather than a full conceptualization of the field.

Dr. Larry J. McClure is an Associate engaged in educational research at the Northwest Regional Educational Laboratory, Portland, Oregon.

ADMINISTRATION AND STAFF DEVELOPMENT

Problems facing career educators

Several barriers hamper the implementation of career education programs. Child labor laws have been viewed by employers and labor leaders as roadblocks to hiring young students. Career educators need to develop a thorough understanding of what can be accomplished by working closely with those who advocate, write, and administer the laws. Critics have expressed concern that career education forces young people to make premature career choices ignoring human needs that are not directly job related. Career educators should anticipate and be prepared to answer such criticisms, explaining the goals of career education programs.

A major issue facing primarily the administrators of career education programs is the problem of communication among the institutions that are charged with preparing students for the world of work. What communication channels are needed, for example, between local high schools and area community junior colleges and vocational-technical centers to assure smooth student transition and to avoid duplication in programs? A need for planning and continuity is critical at all levels of education and career development. This need is reflected in the "stages" of the career education process identified by educators.

Administrators and staff usually request equipment, materials, and other assistance from businessmen; but now career educators are requesting help from the entire community—parents, senior citizens, volunteers, union officials, governmental organizations, and social service agencies. Community willingness to cooperate with schools in some cities has required the establishment of special offices and clearinghouses to coordinate these efforts.

Due to these demands, program administrators are careful to specify how they want to involve people, organizations, and businesses. Strategy may require forming advisory groups composed of parents, businessmen, and community leaders, to seek their advice and their approval of various programs. This process should be an ongoing working relationship.

Facilities

Several questions face administrators concerning needed facilities. One alternative—building career educational facilities and buying the latest equipment—naturally costs a great deal. However, it allows for carefully controlled learning conditions. Another alternative—remolding and using donated equipment—is probably the more common approach. A third alternative, however, is to expand the cooperative education concept and see how far the community is willing to go in providing resources and a broad range of facilities. For example, newer secondary schools emphasize the interrelatedness of disciplines by physically placing electronics, physics, science, and technology classrooms and labs in close proximity and encouraging student and faculty interaction. It is clear that centralized, specialized facilities enable students to enjoy individual attention, using instructors with real-world experience and equipment that students will likely encounter on the job.

Leadership and staffing

The principal remains the key person who decides whether and how career education is implemented at the local school level. Principals decide which teachers will be involved in and responsible for career education courses. In addition to the principal, a wide variety of resource personnel—community volunteers, teacher aides, paraprofessionals, artists-in-residence—can contribute to programs, assuming "teaching" roles after receiving inservice training.

NIE products

Because of the need to orient and train administrators, teachers, and counselors in career education programs, the Education and Work Group at NIE has sponsored research that has resulted in a variety of products to address these needs. For practical instructions to assist administrators in examining these programs, several products—such as *The Administration of Career Education, The Community and School Based Career Education,* and *Attitudes Toward Career Education*—are presented in this *Catalog.* Similarly, some products are focused on the specific needs of teachers in providing career orientation and promoting student awareness, including *Staff Awareness: Racial, Socioeconomic, Sex Stereotypes, Limited Career Potential and An Orientation to Career Education—Group Approach,* and *Teacher Aides in Career Education.* Products range from the elementary level (e.g., *Staff Development in Career Education for the Elementary School*) to the secondary level (e.g., *Career Initiation When Alienation From Secondary School Occurs*).

Several other products synthesize the literature and are relevant to all personnel concerned with career programs. Examples are *The Roles of the Teacher, the Counselor, the Community and Media in Career Education* and the *Module Development Handbook* which assists teachers, educators, and administrators to develop instructional modules. The means of involving school personnel and the community, and the kind of resources available are clearly indicated by the product descriptions comprising the Administration and Staff Development section of this *Catalog.*

CAREER AWARENESS AND EXPLORATION

Two choices face career educators as they try to weave career development concepts and activities into existing instructional programs: The first choice is to incorporate a career education program as a separate curriculum content area with little carryover to other areas; the second choice is to weave the program into existing curriculum areas as a regular part of daily lessons throughout all grades. Career education has chosen the second approach, infusion, as the more reasonable and profitable approach for instructional development.

The infusion of a long-range, ongoing career education program could be accomplished by teachers in all subject areas contributing to career awareness and exploration in their classrooms. For example, a language arts teacher could help students fill out application blanks, résumés, and income tax forms; a social studies teacher could bring in union representatives to discuss labor movement history; a math teacher could use the carpenter's square to teach various concepts in trigonometry; a science teacher could talk about environmental careers; and a health and physical education teacher could help students conduct studies of strength versus dexterity versus endurance in selected jobs. A central problem facing administrators and teachers, however, is how to coordinate these efforts to insure that students have broad exposure to career experiences and opportunities.

Most career awareness programs begin during the elementary years where, typically, classes emphasize awareness of goals and objectives. These objectives are concerned with introducing children to the world of work. Children should understand that the choice of a career is a complex matter affecting all of one's life; and, therefore, they should be encouraged to develop positive attitudes toward work. They should understand that a career contributes to their own self-fulfillment and the welfare of the family, community, Nation, and world. This includes an understanding of the economic sector and the relationship of work to one's own economic well-being.

In addition, children should learn to appreciate and respect all workers, regardless of occupation. Objectives include teaching the student to understand the relationship between their current schooling and work, and to understand that sex and race do not have to be barriers in career decisions. Also, the student should understand the different kinds of rewards and job satisfactions people derive from their work, and the reasons why people choose different careers.

Other objectives are designed to foster individual self-awareness. These objectives include maintaining a sense of self-worth and dignity and instilling a desire to accomplish personal goals. Positive attitudes toward others are acquired by understanding how different people must work together to produce most goods and services. In summary, the student must recognize personal abilities, interests, and career potential and understand the influence that others—such as family, peers, and employers—have on work attitudes and values.

Teachers employ a variety of methods to build career awareness. One strategy is encouraging students to examine worker roles in their immediate environment (home, school, community). Another strategy is using a variety of media, methods, outside resources, guest speakers, tapes, pictures, records, books, pamphlets, brochures, and projects that simulate productive work to assist students in career exploration.

The second phase of career development brings the learner face to face with the world of work by observation and hands-on experience. The learner is offered the chance to actually explore various worker roles and working conditions, and to examine the responsibilities, rewards, satisfactions, and even the negative aspects of a variety of career areas.

Many of the same objectives commonly ascribed to the career awareness phase are addressed during the exploration phase with greater specificity. For example, the student can increase his/her previous knowledge by further analyzing the social, personal, and economic significance of different kinds of occupations, thereby gaining a better understanding of the relationships between education, training, and work opportunities. In this phase, the student can formulate initial career goals that require greater self-understanding. By analyzing personal work values, interests, aptitudes, and abilities, the student will recognize the need for developing social skills in addition to decisionmaking and problem-solving skills. This growth and exploration experience will affect the student's self-concept and plans for self-development.

NIE and career awareness and exploration

At NIE, the Education and Work Group has sponsored research and developed instructional materials to expand career awareness and exploration. Since career exploration hinges on close examination, experimentation, or simulation of real-life experiences, the products are oriented toward giving the student a broad range of knowledge and skills. For example, students can relate occupations to mathematics and science, through several guides: *Career Exploration Through Mathematics, Career Exploration in Earth Sciences,* and *Career Exploration in the Life Sciences.* For establishing general career awareness, guides, such as *Economic and Career Awareness* (A, B, C), provide students with information about the family, consumer knowledge, and economic terms.

The teacher can regularly assess and analyze student interests, aptitudes, and abilities by exposing them to courses and guides which focus on careers, ranging from the technical to the artistic professions. These products have been developed to provide students with the necessary awareness, concepts, and skills to explore their interests in a wide variety of available careers.

CAREER COUNSELING

Career development as a lifelong process

The scope of research in career development is extensive; and, like most issues which surround individual growth and social or cultural change, there are significant differences of opinion as to how people reach vocational maturity.

Most people agree that the process begins as early as the preschool years and that, by the time young people reach formal school in the primary and secondary grades, more focused activities can occur. Areas that traditionally have been the target of career development programs include the following: (1) *Awareness* of self and the world "out there"; (2) *exploration* of interest areas that seem to match individual personality attributes and interests; and (3) eventual *preparation* for a career area or a specific job. Career counseling provides the steady support that leads students toward greater self-understanding and eventual self-determination in a world that sometimes seems bewildering.

The dilemma which elementary and secondary school leaders face as they construct a career counseling program is what to do about two additional career development needs that are not carried through in most programs.

Placement and Followthrough

The placement issue is not a problem for students who intend to pursue postsecondary educational opportunities. College placement is a full-time activity in many large high schools today, but for students seeking immediate entry into the world of work, assistance is usually piecemeal. Also, after persons have completed their preparation and have found a place in the world of work, counseling and other educational services decline considerably. Jobholders who would benefit from updating, retraining, and enrichment programs usually find very few programs designed to fit their needs.

While most scholars agree that career development is a process that takes place continuously over the course of one's life, there also appears to be consensus that the developmental stages are not timebound. For example, even though "career awareness" is seen as the primary responsibility of the elementary school, late adolescents, young adults, and even older adults are continuously learning about the world of work and about their relation to it.

Career counseling needs and objectives

The career counseling component for most formal education and work programs is seen as an integrative function. Matching young people with jobs *per se* may not necessarily be a top priority, but may take second place to a series of "process skills" that help individuals reach full productive capacity.

Several factors affect career decisions, such as age, personality, and life goals. For example, some people may choose a career at 17 and stick to it. Others choose careers at age 21, 26, 35, or 40. Some prefer to keep exploring, even as they pursue a college degree.

Factors influencing career choices apparently change too, depending on individual temperament and strength of character. Some jobseekers, for example, may place a higher value on geographical location than monetary return. Others may seek the satisfactions of community service over those of material gain. It is clear, however, that lack of prior exploration and little access to "market information" when coupled with poor choices create dramatic effects on the individual, such as malaise, goallessness, overqualification, and overspecialization.

While most students in American schools today will "make it" with few evident scars, there are many who need help in overcoming particular disadvantages that their peers may not share. Examples include those who are physically or emotionally handicapped, and the economically handicapped; those whose ethnic background may be a constraining factor in obtaining equal access to jobs, housing, and other opportunities; and those whose sex may affect career decisions. Many of these problems will not be solved by educators alone, yet career educators must be aware of the barriers these special groups face as they strive for full participation as citizens in this complex world.

The questions of what institutions should be in the business of providing career counseling and which individuals are best suited to work with clients are crucial ones. Although these questions may never be resolved to everyone's satisfaction, elementary and secondary schools will continue to carry a major share of the load, even though the job is too big for these institutions alone. Career education and its parallel requirement for career-focused counseling and guidance services stretch over many areas and institutions that are potential sources of help: Adult basic education programs, continuing education, broadcast media, business-related associations, churches, community agencies, correspondence courses, postsecondary education, interest groups, libraries, manpower programs, newspapers and magazines, propriety schools, self-instructional programs, tutors, 2-year colleges, volunteer agencies, and youth service agencies. All play an important role in fulfilling the career counseling needs of individuals living in this complex society.

NIE and career counseling

NIE recognizes the importance of counseling as an integral part of any career education program. Its activity in this area is reflected by the range of products that may be found in the Education and Work (Career Counseling) section of this *Catalog*. Another source of product information in this area is the Guidance and Counseling section of the *Catalog*.

WORK EXPERIENCE-BASED PROGRAMS

Before free public education was available to Americans, young people learned the skills that would carry them through their adult lives by working alongside parents, aunts, uncles, grandparents, and willing neighbors. The visible activities of the community created a compelling model, and the transition from adolescence to self-sufficiency necessarily occurred at a fairly young age.

For today's young people, opportunities to sample adult responsibilities are greatly reduced. Affairs of commerce and government are conducted in distant cities and behind office doors. Fathers and mothers work in specialized fields away from the home. Grandparents often live in retirement, forced out of the cultural mainstream of the community. School schedules fill 6 to 8 hours every day, 9 months each year, for at least 8 and usually 12 or more years. The education and career plans of the student often serve to insulate and further compartmentalize the process of learning, and this process occurs distinct from life in the adult community.

In the meantime, career possibilities have multiplied beyond comprehension. Yet for many who find themselves out of school and in the wrong slot, the classroom years seem wasted, the delays seem unnecessary, and the "experience wanted" barrier in finding a job appears difficult to overcome.

Certainly the idea that hands-on experience reinforces the learning of subject matter is not new to education. Successful school programs—such as vocational agriculture, the school band, choir or thespian troupe, or the school newspaper—have existed in the schools for a long time. Simulated, yet closer to reality, are programs like Junior Achievement, where corporations give aspiring business leaders an introduction to finance, production, and marketing.

The advantage of using simulation in the school setting is that it offers an easily controlled psychological climate for learning. However, reality-based learning outside the classroom, while a more radical departure, is likely to offer longer and more personally satisfying results.

Performance as a measure of success

The push for performance-based learning is closely related to the above issues because, in addition to being useful, knowing how to do something *well* contributes directly to individual feelings of self-worth. Competency-based programs which allow individuals to prove that they have mastered a concept or skill are gradually winning favor among educators. In more and more instances in career education, "credit" or advanced placement is awarded on the basis of learning evidenced from experience outside school settings. In some cases, educators are moving from requiring credentials or certificates as evidence of achievement to requiring an individual portfolio of demonstrable skills and knowledge that can be updated continually.

Another interesting phenomenon is the recognition that employers can play an important role in verifying learned competencies. Some programs do not issue certificates of completion, for example, until the student has demonstrated successful on-the-job experience over an extended period of time.

The business view

There was a time when educators were providing career-oriented programs to students with little or no assurance that employers even needed the new workers or the kinds of skills and attitudes that were being taught. These gaps are being closed, primarily by inviting employers of all types—from business, industry, commerce, government—to serve on advisory committees, provide speakers, and sometimes even to instruct students.

Although employers are generally glad to help, they appreciate followup so that their involvement can be used effectively. Also, employers are wary of programs that will bog them down in redtape; they are rightfully concerned, for example, about their liability. Consequently, career educators must be able to explain the advantages as well as the limitations of student activities at worksites.

The union view

Unions have long proved that they are willing partners in efforts to build and install career education programs. As a group, labor union leaders strongly support the notion of continuing education, as well as basic education. They are as concerned as anyone about the quality of educational programs, particularly basic skills development. They recognize the value of liberal education and life skills, not only to handle work responsibilities but also to meet the challenges of the family and community.

The student's view

Most students resent being placed on busywork jobs that are designed to keep them out of the way. Meaningful work experience—at a real job, holding real responsibilities—requires adaptability and flexibility on the part of the students, employers, and educators alike.

Work experience is regarded as a major cornerstone of career education; it may not matter when or where it occurs, but it must be available. Young people are most rejected for jobs because they do not have work experience; however, there is often no way for them to get the initial experience on which to build.

An entire curriculum built on experience

One of the most comprehensive programs developed under NIE auspices is Experience-Based Career Education (EBCE). EBCE merges academic, vocational, and general education while making use of community resources and people.

EBCE defines "career" broadly to mean "one's progress through life," not just a particular job. Because occupational choices play a powerful role in shaping our sense of identity, self-esteem, and lifestyle, comprehensive education is not separated from specific career development experiences in EBCE. While providing growth in fundamental skills—such as reading, computation, and writing—the model also stresses the "process skills" of inquiry, decisionmaking, and problem solving.

Students are encouraged to explore different jobsites to learn about different career possibilities. They find out what people actually do in their daily work and how they feel about what they do. Thus, while students are acquiring a secondary school education, they are also learning about available careers and relating maturely to adults. Learning by doing enables students to improve on academic skills by using those skills to solve real problems.

Most school districts already offer some elements of the EBCE concept—work-study, cooperative education, and similar programs. However, in addition to providing career-related learning experiences, EBCE pulls together several other innovations that are transforming American education today under various names—schools without walls, action learning, individually prescribed instruction, competency-based certification, and survival education.

RD 060 001

THE ADMINISTRATION OF CAREER EDUCATION

Products to allow an administrator to examine career education and its implications for an educational program

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies, and university/college personnel who are responsible for planning various inservice education programs for staff.

The major topics addressed by the guides are: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This program has been designed for use in a graduate course on a university campus or to fit an inservice program. The program's main purpose is to present to the administrator an opportunity to seriously examine career education and its implications for the educational program. It examines various administrative functions which effect the implementation of career education.

This program can involve and serve administrators at many levels of operation including department heads, building principals, curriculum directors, vocational education coordinators, and superintendents of school districts.

There are nine individual modules contained within this program:

Module I—An Orientation to Career Education
Module II—Change Strategies and Techniques
Module III—Developing Local District Career Education Philosophy
Module IV—Career Education Needs Assessment
Module V—Identification of Available Resources
Moduel VI—Components of Career Education
Module VII—Evaluating Program Components
Module VIII—Financial Program Planning
Module IX—Developing and Implementation Plan

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculum. The programs and materials can be used in both preservice and inservice activities relating to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program can be used with nonprofessionals such as parents and the community. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goal is to present to the administrator an opportunity to seriously examine career education and its implications for the educational program.

PATTERNS OF USE

The staff development materials were designed primarily to be used in group settings where the sharing of ideas and concerns can take place. However, most of the programs, all or in part, can be used on an individual basis.

The staff development materials were seen as usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

A formal evaluation is not a part of this program. Evaluation suggestions are provided, and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

RD 060 001

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond that which is normally available in school settings. No special services such as teacher training or external testing, not usually available in school systems, are needed. The staff development materials do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States who were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?

Are any of the observed changes in participant performance related to location in which the program was tested?

Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with that claimed by the developers. Also, the programs generally were not biased as a result of maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on the decisions of administrators and others concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot-versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Administration of Career Education	1	To be announced	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The Administration of Career Education was copyrighted in 1974, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 002

ATTITUDES TOWARD CAREER EDUCATION

A program to foster more favorable participant attitudes toward career education

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

The purpose of this program is to foster more favorable participant attitudes toward career education. Specifically, it addresses: (1) Involving the participants in learning activities that will increase the likelihood of their continued participation in the inservice program, (2) inducing the participants to critically assess career education materials in order to integrate this information with their own areas of expertise, and (3) engaging the participants in role-playing behavior that is inconsistent with their private feelings in order to optimize an attitude change favoring career education.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

This product includes five sections:

I. Procedures manual
II. Research base and rationale
III. Teacher workshop description
IV. Supportive materials
V. Attitude assessment instrument

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) AND PURPOSE(S)

To foster more favorable participant attitudes toward career education.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services, such as teacher training or external testing not usually available by school systems, are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?
2. Are any of the observed changes in participant performance related to location in which the program was tested?
3. Are changes in participant performance related to their sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost Per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Attitudes Toward Career Education	1	15.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

Attitudes Toward Career Education **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 003

GENERAL ORIENTATION TO CAREER EDUCATION–AN INDIVIDUAL APPROACH

An individualized approach to familiarize administrators with career education

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies, and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

Each unit contains goal statements, an introduction, performance objectives, content, study exercises and answers, and a posttest. A pretest also allows users to verify material they already know. The program is estimated to take an average of 5 to 6 hours to complete.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goals are to introduce to educators: (1) A rationale that underlies the need for career education, (2) the four major career education models currently developed by the National Institute of Education, (3) the goals and objectives of the school-based career education model, and (4) specific functions of different components within the school-based career education model.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings in which the sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to location in which the program was tested?

3. Are changes in participant performance related to their sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
General Orientation to Career Education—an Individual Approach	1	6.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

General Orientation to Career Education—An Individual Approach **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 004

THE COMMUNITY AND SCHOOL BASED CAREER EDUCATION

A planning guide for school practitioners who are responsible for involving the community in career education

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and to university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and function of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This test presents theoretical background materials, references, planning models, and suggestions for developing programs and practices in order to secure community support and participation in school-based career education. It includes a set of five monographs which can be used with various segments of the school community.

These resource and planning guides were developed for school practitioners who are responsible for involving the community in career education. State department and teacher-training personnel will find it useful for preservice and inservice training of counselors, teachers, and educational administrators. Sections of the program, the entire text, or newly prepared materials based on the text can be used in conferences and meetings with lay public groups, parents, business and industry representatives, government agencies, minority group representatives, and professional and community organizations.

The program consists of six sections: (1) An overview of community involvement in career education, (2) a community involvement model, (3) career education—its meaning for American minorities, (4) parent involvement in school-based career education, (5) American business and school-based career education, and (6) the student and the involved community.

SUBJECT AREA(S)

Career education is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users are persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals, such as parents and the community. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goals are to secure community support and participation in school-based career education and to develop a set of five monographs which can be used with various segments of the school community.

PATTERNS OF USE

The staff development materials are designed to be complementary to the introduction of career education curriculum. The programs and materials can be used in both preservice and inservice activities relating to the content area of career education

The materials were intended primarily to be used in group settings where ideas and concerns are exchanged. Most of the programs can be used individually, all or in part.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

Formal evaluation is not a part of this program. Evaluation suggestions are given, and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond that normally available in school settings. No special services, such as teacher training or external testing not usually made available by school systems, are needed. The staff development materials in themselves do not necessitate any organizational changes although implications or suggestions resulting from involvement in these programs may require any number of changes in organizational structure or practice. The staff development materials are generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive efforts of researchers, teacher educators, teachers, and other professionals throughout the United States who were involved in various activities such as drafting, revising, editing, reviewing the program, and testing it on selected subjects.

During the field test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants: Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such confounding effects as maturation, history, and time? Are any of the observed changes in participant performance related to location where the program was tested? Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did bring about changes in performance consistent with that claimed by the developers. The programs generally were not hindered by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. Further, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are suitable for general use with populations depending only on the decisions of administrators and others concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. Field tests have not been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Community and School Based Career Education	1	3.25	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The *Community and School Based Career Education* was copyrighted in 1974, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 060 005

DEVELOPING LOCAL CAREER INFORMATION SYSTEMS FOR MIDDLE AND SECONDARY SCHOOLS

A handbook for developers planning to implement a career information system

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This handbook is approximately 60 pages in length, containing text, graphic illustrations, sample materials, and bibliographic information. The handbook is divided into four chapters: (1) Conceptualization of a career information system; (2) implementing the model—career information system, grades 10-12; (3) guidelines for local development of a career information system; and (4) uses of the career information system in career education.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goals are to supply local, regional, and State developers with the rationale, framework, and guidelines to develop a career information system or to develop career information materials to supplement an existing career information system.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided, and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to location in which the program was tested?

3. Are changes in participant performance related to their sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Developing Local Career Information Systems for Middle and Secondary Schools		3.25	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

Developing Local Career Information Systems for Middle and Secondary Schools **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 060 006

AN ORIENTATION TO CAREER EDUCATION–GROUP APPROACH

Products to provide general career education orientation to teachers and administrators

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

The product is designed for small- or large-group instruction under the direction of university staff, State department personnel, or local district inservice coordinators. The eight modules can be used separately or in a variety of sequences to meet specific teacher or learner needs.

Module I— Why career education
Module II— Present needs for career education
Module III— Career development theory-foundations for career education
Module IV— Career education goals and planning considerations
Module V— National career education models
Module VI— Implementation strategies
Module VII— Role identification in career/education
Module VIII— Resources in career education

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goal is to provide general career education orientation to teachers, administrators, counselors, and professional level support staff in four general areas: (1) Historical content and factors that have stimulated the need for career education, (2) foundations of career education and means to operate it, (3) cooperative efforts necessary between all educational staff and community personnel, and (4) implementation strategies.

PATTERNS OF USE

The staff development materials were designed primarily to be used in group settings in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services, such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to location in which the program was tested?

3. Are changes in participant performance related to their sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost Per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
An Orientation to Career Education—Group Approach	1	25.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

An Orientation to Career Education—Group Approach **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 007

STAFF AWARENESS: RACIAL, SOCIOECONOMIC, SEX STEREOTYPES, LIMITED CAREER POTENTIAL

Products to help teachers increase their expectations of career potentials of all students

The purpose of this program is to increase the expectations of teachers toward the career potentials of all students regardless of race, sex, ethnic background, or family socioeconomic status.

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) The need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of the career education curriculum. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The program is designed to enable teachers: (1) To gain a greater awareness of the career potential of each student irrespective of the student's race, sex, ethnic background, or socioeconomic status; (2) to develop a greater awareness of the relationship between their student-directed behaviors and their student expectations; (3) to change negative attitudes that are related to limited student expectation; and (4) to develop instructional strategies that assist students in broadening their career aspirations and expectations.

PATTERNS OF USE

The staff development materials were designed primarily to be used in group settings where sharing of ideas and concerns can take place; most of the programs can be used entirely or in part on an individual basis. The staff development materials were seen as usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

A formal evaluation is not part of this program.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations: the specification of how much time is necessary has not been determined.

IMPLEMENTATION PROCEDURES

The staff development programs and materials do not require special equipment and facilities beyond those which are normally available in school settings. No special services such as teacher training or external testing (not usually available in school systems) are needed. The staff development materials in themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. In time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were designed by means of the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such confounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to the location in which the program was tested?

3. Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. For the most part the programs were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. The programs were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on adminstrators' or others' decisions concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff Awareness: Racial, Socioeconomic, Sex Stereotypes, Limited Career Potential	1	8.75	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Taylor, Director

AVAILABILITY

Staff Awareness: Racial, Socioeconomic, Sex Stereotypes, Limited Career Potential **was copyrighted in 1974, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

**Product Utilization Section
Center for Vocational Education
Ohio State Univeristy
1960 Kenny Rd.
Columbus, Ohio 43210**

RD 060 008

STAFF DEVELOPMENT IN CAREER EDUCATION FOR THE ELEMENTARY SCHOOL

Materials to provide general career orientation to all teachers, with special emphasis on elementary teachers

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This program focuses on facets of career education that are important to all teachers as well as on topics believed to be of special importance to elementary teachers. The computerized version of the product is designed for individual and for small- or large-group instruction under the direction of a local staff development coordinator. The modules can be used separately or in sequence to meet specific teacher-identified needs:

Module I—Career Education on an Integrating Process
Module II—Career Development Theories
Module III—Self-Concept Development
Module IV—Child Study
Module V—Curriculum
Module VI—Community Involvement
Module VII—Career Education and Minorities

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculum. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goal of this program is to provide general career education orientation with specific discussions relevant to the elementary teacher.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided, and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. All services required are those which are usually available by school systems. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement of these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants: Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such confounding effects as maturation, history, and time? Are any of the observed changes in participant performance related to location in which the program was tested? Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations, depending only on adminstrators' or others' decisions concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff Development in Career Education for the Elementary School	1	15.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

***Staff Development in Career Education for the Elementary School* was copyrighted in 1974, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 060 009

STAFF DEVELOPMENT GUIDELINES FOR CAREER EDUCATION

Guides for school personnel on the role of the inservice coordinator within career education programs

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goals are to familiarize school personnel with the functions and responsibilities that could and/or should be assigned to the role of the inservice coordinator within career education programs.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings, in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services, such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to location in which the program was tested?

3. Are changes in participant performance related to the participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. The programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost Per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff Development Guidelines for Career Education	1	15.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

***Staff Development Guidelines for Career Education* was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 010

STAFF DEVELOPMENT PROGRAM FOR THE IMPLEMENTATION OF CAREER EDUCATION

Products for local school district personnel who will conduct teacher training programs in career education

The focus of these products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

The major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This (group and self-instructional) program was developed primarily for helping local school district inservice personnel plan and conduct training programs for teachers and other instructional staff responsible for the classroom use of comprehensive career education model curriculum materials. In addition to providing content and materials for helping staff members understand and use the teacher's guides, the program also contains concepts and principles.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The major goals are to help local school district inservice personnel plan and conduct training programs for teachers and other instructional staff responsible for the classroom use of the comprehensive career education model teacher's guides.

PATTERNS OF USE

The staff development materials were designed primarily to be used in group settings in which sharing of ideas and concerns can take place. However, parts or all of most of the programs can be used on an individual basis.

The staff development materials were seen as usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided, and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

The staff development programs and materials do not require special equipment and facilities beyond those which are normally available in school settings. All services required are those which are usually available by school systems. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants: Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such confounding effects as maturation, history, and time? Are any of the observed changes in participant performance related to location in which the program was tested? Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with that which the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations, depending only on administrators' or others' decisions concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff Development Program for the Implementation of Career Education (teacher's guides)	1	Not determined	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

Staff Development Program for the Implementation of Career Education (Teacher's Guides) was copyrighted in 1974, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 011

STAFF DEVELOPMENT PROGRAM FOR PROMOTING EFFECTIVE USE OF COMMUNITY RESOURCES IN CAREER EDUCATION

Guides for school staff members to help generate extensive use of community resources in career education

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education, (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

The purpose of this program is to help school staff members make more effective and more extensive use of community resources in career education. The materials are designed for large- or small-group instruction. Program materials include: (1) Community resource and career education—provides a rationale for community resource use in career education based on two attitudinal surveys; (2) needs assessment (group and individual)—a procedure that can be used to determine current staff attitudes, usage of resources, and training interests; (3) workshop plan—includes a suggested instructional plan for orienting staff to the use of community resources; and (4) appendixes—include information on the role of the community resource coordinator and the development of a community resource directory.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

To help school staff members make more effective and more extensive use of community resources in career education.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings, in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services, such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such compounding effects as maturation, history, and time?
2. Are any of the observed changes in participant performance related to location in which the program was tested?
3. Are changes in participant performance related to the participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost Per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff Development Program for Promoting Effective Use of Community Resources in Career Education	1	15.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

Staff Development Program for Promoting Effective Use of Community Resources in Career Education **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 012

A TRAINING PROGRAM FOR THE IN-SERVICE COORDINATOR IN CAREER EDUCATION

Training products to familiarize school personnel with functions of the inservice coordinator in career education programs

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education, (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

The intended audience includes local district personnel as well as teacher educators who are both interested and responsible for the selection of and training of personnel for the coordination of inservice activities.

SUBJECT AREA(S)

The staff development materials are designed to be complementary to the introduction of career education curriculums. The programs and materials can be used in both preservice and inservice activities related to the content area of career education.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators, and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program could be used with nonprofessionals such as parents and community persons. This program is not designed for student use

GOAL(S) OR PURPOSE(S)

The major goals are to assist persons responsible for career education programs in planning and implementing an inservice education program for all staff.

PATTERNS OF USE

The staff development materials are designed primarily to be used in group settings, in which sharing of ideas and concerns can take place. However, most of the programs can be used either partially or totally, on an individual basis.

The staff development materials are usable in inservice or preservice courses or workshops.

ASSESSMENT PROVISIONS

No formal evaluation is a part of this program. Evaluation suggestions are provided and it is assumed that the learner and/or coordinator will use the suggestions as they see fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond those normally available in school settings. No special services, such as teacher training or external testing not usually available by school systems are needed. The staff development materials themselves do not necessitate any organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are seen as generally self-installable and self-contained. Over time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed through the extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States. These individuals were involved in various activities such as drafting, revising, editing, reviewing, and testing the program with a set of appropriate individuals.

During the field-test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

1. Does the program induce the kinds of changes in performance claimed by its developers, changes over and

above those attributable to such compounding effects as maturation, history, and time?

2. Are any of the observed changes in participant performance related to location in which the program was tested?

3. Are changes in participant performance related to the participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with those the developers claimed. Also, the programs generally were not biased by such effects as maturation, history, location, and time, thus making the programs transportable to other settings. In addition the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on administrators' or others' decisions concerning who should be involved, relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost Per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
A Training Program For the Inservice Coordinator in Career Education	1	12.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

A Training Program for the Inservice Coordinator in Career Education **was copyrighted in 1974 and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 013

TEACHER AIDES IN CAREER EDUCATION

Guides to create awareness of potential contribution of community helpers to career education programs

The focus of products is on suggested goals, strategies, and resources for planning the administration and implementation of career education. The guides should be especially useful to local and State education agencies, and university/college personnel who are responsible for planning various inservice education programs for staff.

Major topics addressed by the guides include: (1) Need for staff development in career education; (2) role and functions of the inservice coordinator; (3) planning, organizing, and conducting staff development programs; (4) suggested inservice programs for specific groups; (5) evaluating the staff development effort; and (6) sources of inservice education assistance.

This instructional program is designed to create aide, teacher, and administrator awareness of the potential contribution of community helpers to the implementation of career education. The program is organized into four modules covering the role of the aide in career education, role-identification and team-building skills, communication skills, and instructional activities relevant to career education. Separate programs have been established for instructional aides, teachers, and administrators. The aides are exposed to all four modules, while the teachers receive three and the administrators two.

SUBJECT AREA(S)

Staff development materials are designed to be complementary to the introduction of career education curriculum. which can be used in both preservice and inservice activities relating to career education encompass the subject area.

INTENDED USERS AND BENEFICIARIES

This program is designed to be used by persons who are involved with the preservice and inservice levels of education for teachers, administrators and other professional or paraprofessional staff. With knowledgeable and careful adaptation, the program can be used with nonprofessionals such as parents and the community. This program is not designed for student use.

GOAL(S) OR PURPOSE(S)

The purpose of the guide is to create aide, teacher, and administrator awareness of the potential contribution of community helpers to the implementation of career education.

PATTERNS OF USE

The staff development materials were designed primarily to be used in group settings where the sharing of ideas and concerns can take place although most of the programs can be used in whole, in part, or independently.

The staff development materials were deemed usable in inservice or preservice courses or in workshops.

ASSESSMENT PROVISIONS

Formal evaluation is not a part of this program. Evaluation suggestions are given, and it is assumed that the learner and/or coordinator will use the suggestions as seen fit.

TIME REQUIREMENTS

No specific time requirements are mandated by the staff development programs in general. The programs are designed to be adaptable to a variety of individual or group situations. Thus, the specification of how much time is necessary is negotiable.

IMPLEMENTATION PROCEDURES

There are no foreseen implementation procedures beyond the common range of expectations. The staff development programs and materials do not require special equipment and facilities beyond that normally available in school settings. No special services such as teacher training or external testing, not usually made available by school systems, are needed. The staff development materials per se do not necessitate organizational changes. Implications or suggestions resulting from the involvement in these programs may, however, require any number of changes in organizational structure or practice. The staff development materials are regarded generally as self-installable and self-contained. In time, some of the material may become outdated.

ASSURANCES AND CLAIMS

The staff development materials were developed as a result of extensive involvement of researchers, teacher educators, teachers, and other professionals throughout the United States who were engaged in various activities such as drafting, revising, editing, reviewing, and testing the program with selected subjects.

During the field test phase of the staff development programs, questions such as the following were addressed concerning the direct impact or effect the program had on participants:

Does the program induce the kinds of changes in performance claimed by its developers, changes over and above those attributable to such confounding effects as maturation, history, and time?

Are any of the observed changes in participant performance related to location where the program was tested?

Are changes in participant performance related to participant's sex, years of teaching experience, degree of prior exposure to a formalized career education effort, and/or degree of prior exposure to the content area being discussed in the program?

Reports of the field test of each of these programs are available from the developers. In general, the programs did result in changes in performance consistent with that claimed by the developers. Also, the programs generally were not biased as a result of such effects as maturation, history, location, and time thus making the programs transportable to other settings. In addition, the programs generally were not biased by participant factors such as sex, years of teaching experience, or degree of prior exposure to career education. Therefore, the staff development programs are of general use with populations depending only on decisions of administrators or others concerning who should be involved relative to their role responsibilities.

The existing staff development programs are revised versions based on suggestions from the field test and review of the pilot versions. No field test has been conducted on the existing versions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher Aides in Career Education	1	To be announced	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Taylor, Director

AVAILABILITY

***Teacher Aides in Career Education* was copyrighted in 1947, and copyright is claimed until January 1, 1977. It is currently available from the publisher/distributor:**

**Product Utilization Section
Center for Vocational Education
1960 Kenny Rd.
Columbus, Ohio 43210**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 014

MANAGEMENT INFORMATION SYSTEM FOR VOCATIONAL EDUCATION (MISVE)

A system for managers to increase accountability through the improved utilization of information

The Management Information System for Vocational Education (MISVE) is being designed for managers concerned with better planning and accountability through the improved utilization of information. The design of this system was prompted by the recognition that while many vocational education agencies in recent years have allocated substantial resources to the task of upgrading their existing management information systems so that appropriate data will be available to support administrative decisionmaking and reporting, these efforts usually have failed to produce exemplary systems. This is because there continues to be a lack of consensus about what constitutes a helpful, usable, and practical data base which supports management's information requirements and because Management Information System (MIS) administrators have often been unable to take advantage of the latest in computer software technology and are thus hindered in producing data for management when, and in the form, it is needed. MISVE is designed to deal with both of these problems.

MISVE uses a data base management file organization concept and data base structuring to provide users with the widest flexibility in determining the size and complexity of their data bases. MISVE is also designed to deal effectively with pervasive problems of most information system administrators who must have options open to them for acquiring and maintaining computer software on computer hardware which is available to them, and who must periodically redefine information needs, update existing data bases, and access data in a form and at a time when it is needed.

An information subsystem is made available which includes data collection instruments and procedures which can be adapted to meet unique user requirements. These instruments collect data at the secondary, postsecondary, and adult levels.

Although MISVE provides users with data collection instruments, this information system does not require the use of a fixed set of prior-agreed-to data elements. The MISVE software structure permits small or large data bases with modifications being made at the user's option.

System 2000, a commercially available Data Base Management System (DBMS), has been selected for use in the development of MISVE. Computer programs are made available which are required for using System 2000 in conjunction with the MISVE information subsystem. These computer programs (load, update, and edit) will be available as part of the documentation supplied to MISVE users.

A product package composed of a number of nontechnically oriented documents will be available to potential users to guide them in assessing the value of MISVE for their needs. In addition, a number of technical manuals will be available for MIS administrators that will provide information needed by them to adapt, install, operate, and maintain MISVE with a minimum of external assistance.

SUBJECT AREA(S)

The subject area is an information subsystem which includes data collection instruments and procedures that can be adapted to meet unique user requirements. These instruments collect data at the secondary, postsecondary, and adult levels about student characteristics; followup of former students; educational outcomes; vocational programs and services; instructional facilities; instructional costs; equipment and materials; State and local staffing and assignments; local plans for vocational education; and manpower requirements.

The system provides for input of manpower data collected through a variety of approaches such as occupational employment surveys of the U.S. Department of Labor, which are locally generated manpower surveys and inputted into MISVE via coding crosswalks. Most MISVE data are collected at the local school district level and these data can then be aggregated to produce regional and State totals.

INTENDED USERS AND BENEFICIARIES

MISVE is designed to be used in operational environments by vocational education management and supervisory personnel at State and local levels. Other system users might include advisory and regulatory bodies who require information outputs to assess and monitor educational system activities and outcomes.

GOAL(S) OR PURPOSE(S)

MISVE's goals are to provide vocational education agencies with an examplary management information system that employs the latest concepts in information system retrieval and processing technology, and to address itself directly to the national concern for better planning and accountability through improved utilization of information.

PATTERNS OF USE

MISVE is provided to users as a complete information system. Users can modify all system components to meet unique user needs. Guidelines and directions for modification are contained in the system documentation.

A computer software subsystem is provided which operates in online and batch-processing modes and uses an English-like natural language to access and update data bases via computer terminals. A report generator feature is available for producing "one-time" and standard reports. COBOL and FORTRAN interface programs permit MISVE users to continue to use their existing computer programs written in these computer languages.

The DBMS software package can be acquired from the vendor under a variety of arrangements. MISVE users can also purchase time from computer time-sharing services which offer System 2000 to their subscribers. Computer software maintenance is obtainable directly from the software vendor or time-sharing service.

ASSESSMENT PROVISIONS

Potential users must assess for themselves MISVE's value to them. Assessment of the validity of source data will be the responsibility of the data gathering agency, although a computer edit program is made available to assess the validity of field and range values and to provide error messages.

TIME REQUIREMENTS

This product is not timebound but is intended for continuous use.

IMPLEMENTATION PROCEDURES

System 2000 operates on IBM, UNIVAC, and CDC computer hardware currently available to most State-level education agencies. Smaller educational organizations can make use of the needed computer hardware through universities, other government agencies, or commercial time-sharing services providing System 2000 to their subscribers. The use of other DBMS software with MISVE is possible. In that event, MISVE's computer hardware requirements might be different.

MATERIALS AND EQUIPMENT

MISVE is in the field trial stage of development; at this time, however, it appears that MISVE will require no additional personnel beyond that currently employed by States to collect and process MIS data. Data collection instrument masters will be available from the center. Computer terminals can be acquired from a number of commercial vendors.

ASSURANCES AND CLAIMS

The MISVE product does not, by itself, pose a physical, psychological, sociological, or other harmful condition to those involved in its use. However, the user is ultimately responsible for the operation of MISVE, the protection of individual privacy, security of information, and other matters which fall under the purview of protection of human subjects. There is no evidence to assume that the product perpetuates sexism, racism, or other biases related to religion, age, or socio-economic stereotypes.

No assurances of replicability or transportability can be made at this time because MISVE is undergoing field trial in only one State. The assurance of replicability or transportability will require a further field test and validation of the system in several locations. This assurance can be verified by late 1976, but only if additional funds are obtained for this purpose.

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Harold Starr, Program Director

AVAILABILITY

MISVE documentation will be delivered to the National Institute of Education by October 31, 1975. No funds have been provided for product dissemination.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 015

MODULE DEVELOPMENT HANDBOOK (A PRODUCT OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)

A handbook to assist teacher educators and administrators in the development of performance-based instructional modules

The *Handbook for the Development of Professional Vocational Teacher Education Modules* is designed to assist teacher educators and administrators in the development of performance-based instructional modules. It describes the tested structure and specifications for developing performance-based modules utilized in development of the modules in the performance-based professional education curriculums program.

The handbook contains a description of the performance-based vocational teacher education system; an explanation, with examples, of the module format; and an illustrated module. While the handbook is designed primarily as a "stand-alone" product, it may be used to enhance modularized instructional programs.

SUBJECT AREA(S)

Development of professional vocational teacher education modules.

This handbook is approximately 100 pages in length and builds on the module structure developed in the performance-based professional education curriculums program.

INTENDED USERS AND BENEFICIARIES

The primary users of this product will be teacher educators involved in the development of curricular materials for the preparation of preservice and inservice vocational teachers, and local and State education agency personnel engaged in the development of curricular materials for the preparation and/or upgrading of preservice and inservice teachers.

GOAL(S) OR PURPOSE(S)

The purpose of the handbook is to provide teacher educators, administrators, and local and State education agency personnel concerned with curriculum development with a detailed guide for developing performance-based instructional modules.

PATTERNS OF USE

The handbook is a self-contained guide. It may be used in teacher education institutions and local and State education agencies to aid in the development of instructional modules covering professional and technical competencies needed in specific educational settings, but not included in existing performance-based modules. The handbook may also be used as a supplementary aid in implementing modularized instruction programs.

ASSESSMENT PROVISIONS

As a guide to be used in developing instructional modules, the handbook contains no provisions for evaluation of the user.

TIME REQUIREMENTS

The time spent in using the handbook will vary, depending on the needs and background of the particular institutions and individuals using it, and the scope and nature of the materials being developed.

IMPLEMENTATION PROCEDURES

The handbook, as a self-contained guide, does not require any special equipment, services, or procedures for implementation.

ASSURANCES AND CLAIMS

A prototype of the handbook was used by 20 graduate students and their instructors at Ohio State University. As part of their seminar, each student was asked to produce an instructional module using the handbook. Before the course was completed, each student critiqued the handbook and returned it to the instructor. Although product effectiveness was the major thrust of these critiques, students were encouraged to respond in terms of any negative attributes of the handbook. No problems of social bias were reported.

A revised edition of the handbook is currently being used by the six center staff members who are preparing modules for advanced field testing.

Each consultant hired to revise modules for advanced testing is first given a copy of the handbook to read to gain an orientation to what the revision task is and to guide revision efforts. It is estimated that approximately 15 consultants will have used the handbook before all of the modules are prepared for advanced field testing.

Although transportability will not be addressed directly, the fact that 15 consultants from a wide range of institutions will have used the handbook should provide some assurance that it is transportable.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Handbook for the Development of Professional Vocational Teacher Education Modules (1 volume)	1	Estimated at $6.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

James B. Hamilton, Director
Performance-Based Professional Curriculums Program

AVAILABILITY

A preliminary edition of the *Handbook for the Development of Professional Vocational Teacher Education Modules* is being used by program staff to guide module development and revision in the performance-based professional education curriculums program. Upon completion of module format refinement, the handbook will be revised accordingly and will be available for publication July 1976. For more information contact:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 016

ORIENTATION TO MODULARIZED INSTRUCTION BOOKLET (A PRODUCT OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)

A booklet to assist teacher education faculties develop necessary concepts regarding performance-based instruction

The *Orientation to Modularized Instruction Booklet* is designed to aid in the installation and use of performance-based teacher education modules. This 50-page booklet will assist teacher education faculties and students (teachers-in-training) in the development of necessary concepts regarding performance-based instruction, and will aid each in identifying and assuming their respective roles in implementing modularized, performance-based instruction.

The booklet contains (1) an explanation of the need for systematic research-based teacher education, (2) a discussion of the essential and desirable characteristics of performance-based teacher education (PBTE) programs, (3) a description of modules and their function, (4) a description of the research and development of the performance-based vocational teacher education modules, (5) an explanation of the respective roles of teacher educators and students in PBTE programs, and (6) a listing of professional vocational teacher education modules available.

SUBJECT AREA(S)

Preservice and inservice teacher education, and vocational education.

INTENDED USERS AND BENEFICIARIES

Primary target audiences for the *Orientation to Modularized Instruction Booklet* are: (1) Teacher educators engaged in preservice and inservice education of vocational teachers, (2) State department of education and local education agencies involved in inservice training and/or improvement of vocational teachers, and (3) preservice and inservice vocational teachers-in-training.

The ultimate intended beneficiaries of the product are the vocational students who will benefit through improved instruction.

GOAL(S) [illegible](S)

The purp[illegible]e *Orientation to Modularized Instructi*[illegible]e: (1) To increase the acceptance by teacher edu[illegible] State Department of education personnel, and tea[illegible]ing of essential concepts related to pe[illegible]odularized instruction; (2) to improve [illegible]nd acceptance by teacher educators, St[illegible] education personnel, and teachers-in-training o[illegible]pective roles in implementing and conduc[illegible]ance-based modularized instruction; and (3) to orient [illegible]ance-based professional vocational teacher [illegible]ation modules to module format, to the intended [illegible]e use, and to the total listing of modules available for use.

PATTERNS OF USE

The *Orientation to Modularized Instruction Booklet* is a self-contained booklet containing several sections which can be used in their entirety as organized, or one or more sections may be selected depending on the needs and background of the user. The orientation booklet is designed to assist in implementation of the performance-based professional vocational teacher education modules. Teacher educators and others implementing the curriculum may very well use the entire booklet, while teachers-in-training may use only the section dealing specifically with the role of the student in modularized instruction.

ASSESSMENT PROVISIONS

The booklet is designed for use in implementing performance-based professional vocational teacher education curriculums and contains no provisions for evaluation of the user.

TIME REQUIREMENTS

The time spent using the booklet will vary depending on the purposes, needs, and backgrounds of the individual users. It is anticipated that the booklet will be used as a reference several times during implementation of the curriculums.

IMPLEMENTATION PROCEDURES

The *Orientation to Modularized Instruction Booklet* is a self-contained resource for users of performance-based teacher education modules. As such, it does not require special equipment, facilities, services, or procedures in its implementation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Orientation to Modularized Instruction Booklet	1	6.50 (estimated)	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

James B. Hamilton, Director
Performance-Based Professional Curriculums Program

AVAILABILITY

The booklet is under development at this time. A preliminary revision of the booklet will be used in conjunction with advanced testing of the performance-based vocational teacher education modules. It is then to be refined and available for publication July 1976.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 060 017

PROFESSIONAL VOCATIONAL TEACHER EDUCATION MODULES (118) (PRODUCTS OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)

Vocational teacher curricular materials for vocational education training

The performance-based *Professional Vocational Teacher Education Modules* constitute vocational teacher curricular materials organized in stand-alone unit form for preservice and/or inservice use in all vocational education service areas. The modules are based on studies of professional performance requirements needed for vocational teaching which resulted in verification of 384 performance elements. These elements were grouped into 10 categories and provided the professional performance base for module development. One hundred and eighteen modules of approximately 50 pages each have been developed and are grouped as follows:

A—Program planning, development, and evaluation (15 modules)
B—Instructional planning (6 modules)
C—Instructional execution (29 modules)
D—Instructional evaluation (6 modules)
E—Instructional management (9 modules)
F—Guidance (6 modules)
G—School-Community relations (10 modules)
H—Student vocational organizations (15 modules)
I—Professional role and development (8 modules)
J—Coordination (14 modules)

The module format is standardized into four major components: Title page, introduction, module structure and use, and learning experiences. The modules are designed for use in both preservice and inservice vocational teacher education programs in the various vocational service areas. The individualized instructional mode of the module learning experiences allows either individual or group instruction to be used. The research base for the modules provides objectives which focus on competencies verified as important and indicates that the competencies have been achieved.

Organization into modular units offers flexible use of one or more modules appropriate to local needs. Specific competencies can be developed by selecting the module or modules containing learning experiences assigned to fulfill these needs. Through selection of appropriate modules, programs can be tailored to meet the needs of individual teachers.

SUBJECT AREA(S)

The modules cover professional performance requirements needed for vocational teaching.

INTENDED USERS AND BENEFICIARIES

Primary users of the performance-based vocational teacher education modules will be: (1) Teacher educators engaged in preservice and inservice education of vocational teachers, (2) State departments of education and local education agency personnel involved in inservice training and/or improvement of vocational teachers, and (3) preservice and inservice vocational teachers in training. A large number of the modules may also be used in the preparation of other career education teachers, although they have not been field tested for this purpose.

There are about 3,500 vocational teacher educators in 363 institutions of higher education. If each of these institutions serves a minimum of 75 (preservice and/or inservice) vocational teachers annually, the target population would be approximately 27,000 per year. This is in addition to the 3,500 teacher educators and an undetermined number of State department and local education agency personnel with inservice teacher training responsibilities. The ultimate target population, of course, comprises the hundreds of thousands of vocational students who will benefit through improved instruction.

GOAL(S) OR PURPOSE(S)

Students completing the modules will possess the knowledge, attitudes, and skills necessary to discharge the duties of a vocational teacher. Such teacher competencies include: (1) To plan for, develop, and evaluate vocational programs; (2) to plan for, carry out, and evaluate instruction; (3) to manage the instructional environment; (4) to guide students in their decisionmaking; (5) to foster school-community relations; (6) to advise and direct the student vocational organization; (7) to carry out responsibilities of their professional role and develop their teaching expertise; and (8) to coordinate the cooperative educational program.

PATTERNS OF USE

The performance-based vocational teacher education modules are designed for use in both preservice and inservice educational programs. The individualized instructional mode of the module learning experiences allows either single or group instruction to be used. Patterns of use include: (1) Implementation of entire programs of preservice and inservice competency-based professional teacher preparation, (2) structuring of courses consisting entirely of individualized competency-based professional teacher preparation, (3) substitution of modules for portions of or all of existing courses, (4) selection of modules to meet specific instructional needs on an individual basis, and (5) integrating professional preparation beginning with the first year of undergraduate teacher preparation.

ASSESSMENT PROVISIONS

Through information provided in the front section of each instructional package (module), students can, using self-diagnosis, determine how much of the module (for example, the entire module, selected learning experiences, and/or final learning experience) they need to complete in order to achieve competency. As the students complete each learning experience, immediate feedback is provided through self-checks, model answers, performance checklists, and final assessment by an experienced teacher educator using a teacher performance assessment form.

TIME REQUIREMENTS

Two factors affect the time required to complete each module: (1) Because modules are performance-based, not time-based, and because student progress through the module is self-paced, individual students will require varying amounts of time to complete a module; and (2) because the competencies to be attained in the different modules vary in scope, the time required to complete a given module will also vary; for example, the time required to become skilled in introducing a lesson and to present a lesson introduction in an actual school situation varies drastically from the time required to become skilled in conducting a student followup study and to conduct a student followup study in an actual school situation.

IMPLEMENTATION PROCEDURES

Although modules are designed to allow students to complete most of the learning activities independently, this form of individualized instruction depends on adequate resources and resource persons being available to the students. It is necessary to have learning laboratories and/or resource centers where the publications and standard audiovisual equipment required for the completion of modules are assembled for student use. Such laboratories or centers also need to include supplementary or enrichment types of texts and materials.

Arrangements need to be made with local schools offering vocational programs so that students are assured of having real school settings in which to demonstrate final competency. Teacher educators who will serve as resource persons need to be oriented to the concepts and procedures underlying performance-based teacher education programs. Resource persons need to have expertise in the competencies covered by the modules. Since one of the major functions of the resource person is to help students map out their teacher education programs, resource persons must be skilled in identifying student needs and in matching those needs to module selection.

If a totally performance-based teacher education program which meets all essential characteristics of such programs is to be established, more extensive reorganization of the existing teacher education program may be necessary. Such reorganization may include: (1) Changes in courses and course requirements; (2) provision for field-centered instruction such as learning to teach while in an actual school situations; (3) changes in staffing pattern; for example, differentiated staffing; (4) arrangements for additional financial support necessary to compensate for the increased time needed for teacher educators to individualize their instruction; and (5) provisions for certification on the basis of demonstration of specified teacher competencies rather than on the basis of credit hour accumulation.

ASSURANCES AND CLAIMS

The modules will not adversely affect users. An early prototype of each of the modules was used by a minimum of 10 teacher trainees and 1 teacher educator. Both the teacher trainees and teacher educator completed questionnaires that were designed to collect adverse user effects. No adverse effects were reported by either group on any of the modules. Revised editions of the modules are currently undergoing advanced field testing with a minimum of 20 teacher trainees and 1 teacher educator. During advanced testing, each teacher trainee and teacher educator will be asked to complete several items designed to identify the negative attributes, if any, contained within each of the modules.

These modules will not perpetuate social biases. A detailed set of procedures was used in developing each module. These procedures included several reviews and critiques of materials by teams of people with wide social representation. The rewriting and editorial teams have included members of two racial minorities and three women who are sensitive to sexual biases and role stereotyping. During advanced testing, each student will be asked to identify any social biases that might be contained in the modules. The teacher educators will also be asked to report any social biases they have found. Therefore, given the editorial staff, plus the responses of students and teacher educators, it seems unlikely that the modules will contain any social biases.

From a conceptual standpoint, the modules should be highly transportable. Through a well-organized process, vocational teachers and teacher educators from all service areas and several institutions contributed to the development of each of the modules. As a result, these modules should be highly transportable across vocational service areas and institutional settings. They should be useful regardless of the amount of teaching experience or the highest level of formal education obtained. Data are being collected on each of these modules during advanced testing. However, because of limited sampling and sample sizes, the question of product transportability will not be empirically addressed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Individualized instruction performance-based modules	Varies with experience and ability of student (5-10 modules per quarter of instructional time)	Estimated at $2.25 each	Consumable (must be replaced after use)	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

James B. Hamilton, Director
Performance-Based Professional Education Curriculums Program

AVAILABILITY

The projected publication date for the performance-based *Professional Vocational Teacher Education Modules* is July 1976. All modules have undergone preliminary field testing. Module revision and advanced field testing are in process on an incremental basis. Modules will be refined following advanced testing and prior to publication. The modules were copyrighted in 1974, and copyright is claimed only during the period of development, test, and evaluation unless authorization is granted by the National Institute of Education to claim copyright on the final materials. For further information, contact:

Center for Vocational Research
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 060 018

CAREER EDUCATION IN THE ELEMENTARY SYSTEM

A training course in career education in elementary schools consisting of video taped instructional units

This is a series of 12 half-hour color video taped instructional units with accompanying ancillary and testing materials, designed as inservice training in career education for teachers, guidance personnel, and administrators in grades K-6. Educational personnel are provided with information to acquaint them with the concepts and philosophy of career education and with the major principles and practices of career education in an elementary school setting. Video tapes feature classroom teachers, students, guidance personnel, administrative personnel, community members, parents, and context authorities discussing and illustrating career education principles, practices, and techniques in the elementary school environment. Content and concept procedures presented in the instructional units emphasize the infusion of career education into the total school curriculum.

Combined with the video tapes is a packet of ancillary/laboratory materials, including both group and individual activities for participant completion. Also included are materials for testing participant progress in content areas covered in the video tapes and ancillary materials; tests include a pretest, unit tests (one for each video tape), and posttest. Materials are designed to be used in conjunction with video taped instructional units. They can adapted for use in either group or individual situations.

SUBJECT AREA(S)

Twelve 1/2-hour color video taped instructional units comprise a comprehensive training course in career education in the elementary school. Titles of all video tapes in the series are as follows:

1. The Concept of Career Education
2. A Complete Career Education Program
3. Job Clustering
4. Integrating Career Education into the Curriculum
5. Total Curriculum Integration
6. Collection and Utilization of Instructional Materials
7. Community Resources
8. Implementation Strategy for the School System
9. Attitudes About Change
10. Dealing with Educational Change
11. Special Interests and Career Education
12. Rewards of a Comprehensive Career Education Program

INTENDED USERS AND BENEFICIARIES

The program is designed specifically for educational personnel in grades K-6. These personnel may include classroom teachers, guidance/counseling personnel, and administrative personnel. Selected tapes might well be used to introduce the concept of career education to parents, business leaders, and other community members. The ultimate beneficiaries are those students who will be better prepared to enter and advance in the world of work as a result of increased teacher competencies in the area of career education.

GOAL(S) OR PURPOSE(S)

The educator who successfully completes the elementary career education training program will be able: (1) To comprehend the major principles and practices of career education in an elementary school setting, (2) to recognize the need for career education in an elementary school setting, (3) to recognize the formative nature of the career education concept, (4) to be aware of possible areas of conflict among educators regarding the concept of career education, and (5) to introduce career education to an elementary school staff.

PATTERNS OF USE

The *Elementary Career Education Program* was designed as a comprehensive sequential series comprising a course in the implementation and infusion of career education. However, as a training program, materials can be used either independently or together as a preservice program, an inservice program, or part of an inservice program, or as a complete course.

ASSESSMENT PROVISIONS

Participants in the career education program are given a pretest to measure entry-level knowledges and skills; this test can also serve as a posttest. Also provided are unit tests (one for each video tape in the series).

TIME REQUIREMENTS

Each video tape in the series is 30 minutes in length. Ancillary/laboratory materials accompanying each video tape will require an average of 2 hours for completion.

IMPLEMENTATION PROCEDURES

A video cassette player is necessary in order to show video tapes. Standard format of tapes is 3/4 inch video cassette.

The career education program is designed to be primarily self-instructional. The program does not require a specialist teacher. Instructional units may be presented in a small-group or individual situation. No organizational changes would be necessitated in existing school structures for effective use of this product.

Video cassettes are reusable over a long period of time. The only consumables are the packet of ancillary materials, textual items (minimal), and written tests for each participant.

ASSURANCES AND CLAIMS

This product has been used with approximately 300 educators throughout 8 States. The product is transportable. Materials can be used effectively without the presence of a specialist teacher without detracting from the quality of instruction presented.

Materials do not appear to display any form of social bias, including ethnic or sexual stereotyping.

The developers have not received any reports of harm associated with the use of this product.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Video cassette—instructional unit	12	27.27	Reusable	ARC
Ancillary materials	1 per participant	6.50	Consumable with each use	RCC
Pretest	1 per participant	2.50	Consumable with each use	RCC
Unit test	12	2.50	Consumable with each use	RCC
Posttest	1 per participant	2.50	Consumable with each use	RCC

DEVELOPER/AUTHOR:

Appalachian Regional Commission
1666 Connecticut Ave. NW.
Washington, D.C. 20235

College of Education and Division of Media Services
University of Kentucky
Lexington, Ky. 40506

AVAILABILITY

The total elementary career education program (including video cassettes, ancillary, and testing materials) is currently available from the distributors.

Video cassettes are available from:
Appalachian Regional Commission
1666 Connecticut Ave., NW.
Washington, D.C. 20235
Ancillary/test materials are available from:
Resource Coordinating Center
306 Frazee Hall
University of Kentucky
Lexington, Ky. 40506

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 060 019

CURRICULUM CONTENT DERIVATION SYSTEM: A USERS' MANUAL OF PROCEDURES AND GUIDELINES

A system offering curriculum developers a data-based approach to deriving program content of occupational preparation

For curriculum developers, the *Curriculum Content Derivation System* offers a systematized and data-based approach to the problem of deriving content for programs of occupational preparation. It is responsive to recent findings which maintain that the content and emphasis of curriculums are far more likely to influence learning achievement than are the media, methods, or strategies for teaching the content. For occupational preparation and job training programs, the usefulness of curriculums depends on their reflecting the performance requirements of the occupations being studied.

This systematized approach to the gathering and use of field information is designed to assist developers of occupational training programs to provide more effective answers to such questions as: (1) How can the content of an existing program be justified? (2) How can it be made certain that graduates are effectively prepared for their occupation if they should move outside this community? (3) If a good program exists elsewhere, how can it be compared with the local program to determine points of content similarity? (4) How can it be routinely determined that the content of a program is up to date? (5) How can the curriculum developer be certain that a program's content is not wasteful of student time and of learning resources? (6) How can employers be assured of what particular skills and knowledge are acquired by training graduates?

These questions deal with issues of the job relevance of training content: Criticalness, comprehensiveness, and timeliness. Such issues are the focus of the procedures being developed. Concurrently, the procedures serve to economize on efforts at content derivation, by systematically narrowing the focus as greater attention to content detail is warranted in the curriculum development process.

The full system will be reported to user personnel in a manual of sequenced procedures and guidelines to aid developers of occupational curriculums in education, business, industry, and government to determine the task and conceptual content of jobs for which students are being prepared, and to select from a large body of verified content that which is most critical for training consideration. The system largely depends upon data obtained from comprehensive and representative surveys of persons closest to, and most knowledgeable about, job performance and its requirements. It will be most cost effective in repeated use for situations where an instructional program is being developed or verified for a number of institutions or settings (such as is done by state and regional curriculum laboratories) or by industrial training departments that service multiple subsidiary firms. The procedures will be of special benefit where there is uncertainty with regard either to relevant performance or appropriate curriculum content, as in new and emerging occupations as they evolve.

In addition to their use for curriculum development, the derivation procedures under development offer the possibility of new approaches to the problems of the effective tracking, assessment, and reporting of learning achievement. The adoption and use of selected procedures potentially could facilitate open-entrance/open-exit instructional programing and could provide learners, potential employers, and instructional personnel with more useful information in the form of performance credentials, for training, placement, and career progression.

SUBJECT AREA(S)

Careers and curriculum development.

Several functional units of procedures and guidelines comprise the User's Manual. The units for identifying relevant job content are: (1) Guidelines for defining occupational scope of interest for curriculum purposes and (2) procedures for identifying and validating comprehensive lists of job performance requirements, expressed as tasks performed, and for supporting technical knowledge required. The units for selecting job content for which training is critical are: (1) Procedures for selecting job tasks and relevant technical concepts and (2) suggestions for identifying particular aspects of each task that warrant emphasis in training.

INTENDED USERS AND BENEFICIARIES

Potential users are developers of occupational curriculums for secondary and postsecondary education (public or private) or for similar training in business, industry, and government. Preferably, users should be at a level which offers high potential impact or broad use of curriculums developed. Ultimate beneficiaries, of course, are the students who will receive instruction and occupational preparation based upon more relevant, important, and timely curriculums for job training or retraining purposes.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To improve the quality of educational programs for occupational preparation by systematic derivation and selection of what is taught, (2) to enable a closer linkage between occupational education and actual work requirements, and (3) to promote the capability of communicating the job-relevant content of training programs so that others may share, programs may be compared, and employers and graduates may know the learning intended.

PATTERNS OF USE

The full system is a sequential one that proceeds from a policy decision to prepare a curriculum and to state the terminal learning objectives. Some of the system components are optional, for use only when more than one job is part of the scope of interest. Some components also offer procedural variations. In addition, all of the components have some stand-alone value, capable of being applied in modular units depending on previous information available or upon differing needs and uses for the information.

The full sequence established for the system is: (1) Determining the occupational scope of interest, (2) constructing and using comprehensive lists of job tasks and supporting technical concepts to obtain performance requirement data, (3) determining the existence of job types within the occupational area of interest, (4) evaluating the relative significance of these jobs for formal instruction, (5) estimating changes in task characteristics and requirements for the near future, (6) selecting tasks and concepts for instructional consideration based upon field data, (7) determining the training emphasis categories appropriate for each selected task, and (8) formulating comprehensive statements of terminal performance objectives for the purpose of communicating the intent of the learning program.

TIME REQUIREMENTS

Time required to use the system for deriving curriculum content is expected to vary greatly from application to application. It will depend, for example, on the degree of uncertainty with regard to the occupation, the prior availability of specific information such as task listings, the complexity of the occupational field being investigated, and the use of various procedural options. However, the time and expense required for repeated use of the full set of procedures should not be nearly so great as for comparable efforts by more conventional and less empirical methods, such as those employing literature searches, interviews with workers, expert advisory committees, or critical incident records. Generally, however, the first-time application to an occupational area does involve a significant initial outlay. Cost-effectiveness value emerges with periodic reapplication and with sharing of information and results with other curriculum developers to which the process is uniquely suited.

IMPLEMENTATION PROCEDURES

Special equipment, facilities, services, and organization are not considered to be the factors of prime importance for the implementation and continued use of the product. What is more essential is a recognition that, when uncertainty exists, time and effort must be allowed for systematically reducing the uncertainty, using data-based methods. Use of the system procedures does, however, involve certain assumptions regarding the availability of curriculum development and data-handling capability, as is normally found in State education agencies, State universities, and among major industrial training departments. Computer programs to accomplish the necessary data processing are part of the total program developed for the system.

Summary Cost Information

It seems reasonable to assume that, with the exception of the manual, the other printed resources will be available to most users. This assumption applies to personnel requirements and services as well. Thus, the specific computer software is the only special requirement of any importance for initial installation, though many user agencies could readily generate the necessary software from the descriptions in the manual. With regard to continuation, the long-term cost of periodically deriving curriculum content is expected to be far less than more conventional methods.

Personnel Required for Product Adoption and Implementation

A person having qualifications in occupational curriculum development, who also has access to persons with capabilities in job description, design of surveys, and data processing is needed.

ASSURANCES AND CLAIMS

There is no evidence to suggest that these procedures could in any way be harmful to the intended users. These users will, however, need to collect data from populations consisting of workers and supervisors. During product development, data collection instruments were subjected to careful scrutiny, including clearance by an approved committee for the protection of human subjects. The content of the questionnaires is focused on job requirements, unrelated to social issues and biases such as racism and sexism. The process, however, could be helpful in establishing equal opportunity requirements for employment tests, with the addition of appropriate respondent background information and data comparisons.

Final assurances of replicability and transportability cannot be offered for the product as a whole prior to product completion, scheduled for January 1976. Strong interim assurances are appropriate, however, based upon design intentions and upon evidence obtained through replicated tryouts of major product components. As part of the design, the product development plan calls for the involvement of potential users in the development and tryout of product components. Those involved have represented several sections of the country and a variety of State vocational agencies and work settings. Task inventory surveys were administered to more than 200 employees in each of 3 rather dissimilar occupations (general secretaries, business-data programers, and auto mechanics) in eight States. Similar tryout of surveys on technical concepts were also conducted. Occupational data from such tryouts will be published with technical reports on the analyses of data-processing portions of the procedures.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
User's manual	1	50.00 (estimated)	Reusable	
Dictionary of Occupational Titles (Dept. of Labor)	1 set	20.00	Reusable	U.S. Government Printing Office, Washington, D.C. 20402
Occupational Outlook Handbook (Dept. of Labor)	1	7.00	Reusable	U.S. Government Printing Office, Washington, D.C. 20402
Computer programs to summarize data, perform analyses, and apply selection rules				To be determined
Access to data-processing services and printing facility				User agency

Note: U.S. Dept. of Labor publications are used only for the scope definition process.

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Frank C. Pratzner, Program Director

AVAILABILITY

At present, the major component parts of the product are in different advanced stages of development ranging from the development of data-gathering instruments to revisions following tryout. The complete product will be in final draft form and ready for publication in January 1976. Arrangements for full publication and distribution of the user's manual are yet to be finalized. The initial version of the task inventory procedures was published in March 1973 by the U.S. Government Printing Office (Washington, D.C. 20402) and is now undergoing minor revision based on the results of field tryout.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 060 020

AN ANNOTATED BIBLIOGRAPHY FOR THE IMPLEMENTATION OF OCCUPATIONAL CLUSTERS

A bibliography of documents relating to 15 Office of Education occupational clusters

An Annotated Bibliography for the Implementation of Occupational Clusters is a selected bibliography of documents announced in *Resources in Education, Current Index to Journals in Education*, and *Abstracts of Instructional and Research Materials in Vocational-Technical Education* relating to the 15 U.S. Office of Education (USOE) occupational clusters. Abstracts are given with each, when available in the ERIC or AIM/ARM files.

SUBJECT AREA(S)

Occupational clusters, occupational education, and career education are the subject areas.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are researchers planning additional research on occupational clusters, curriculum developers undertaking new curriculum development projects on occupational clusters, and practitioners considering implementation of education for occupational clusters.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to organize ERIC and AIM/ARM literature on occupational clusters for researchers, curriculum developers, and occupational educators considering the implementation of occupational clusters in their school systems.

DEVELOPER/AUTHOR:

**ERIC Clearinghouse in Career Education
Northern Illinois University
204 Gabel Hall
De Kalb, Ill. 60115**

AVAILABILITY

***An Annotated Bibliography for the Implementation of Occupational Clusters* is available for $1 from:
ERIC Clearinghouse in Career Education
Northern Illinois University
204 Gabel Hall
De Kalb, Ill. 60115**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 021

CAREER EDUCATION—A HUMANISTIC VIEW (PART 3 OF THE ERIC CLEARINGHOUSE ON TEACHER EDUCATION PROJECT ON CAREER EDUCATION)

A monograph examining the career education concept

This monograph examines the career education concept. Four interrelated premises discussed include specialism, sequentialism, fundamentalism, and credentialism. Each premise is presented in light of its functional and dysfunctional role in career education. Suggestions are included which would enable career education to enhance the principle of maximum possibilities in education, obliterate the distinction between work and leisure, and increase career education's concern with human services.

SUBJECT AREA(S)

Career education and the extent to which it fulfills educational needs and meets or hinders the attainment of education objectives are the focus of this publication.

INTENDED USERS AND BENEFICIARIES

Parties concerned with the career education issue are the primary users of this publication.

GOAL(S) OR PURPOSE(S)

The purpose of this monograph is to contribute to understanding of career education and its potential hazards.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle, NW., Suite 616
Washington, D.C. 20036

Robert J. Nash, Author
Russell M. Agne, Author

AVAILABILITY

Order No. ED 071 995, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 022

CAREER EDUCATION PRODUCT INSTALLATION HANDBOOK

A resource book to increase one's ability to formulate career education product utilization strategies

The *Career Education Product Installation Handbook* (CEPIH) is part of the Diffusion of Innovations Program in the Research and Development Division of The Center for Vocational Education. The CEPIH is designed as a resource book for career education product advocates to increase their ability to formulate effective product utilization strategies. It has potential for multiplying the effectiveness of educational products by speeding up the product implementation process and facilitating more durable change in educational settings.

A seven-step procedure for installing career education products is discussed in the handbook. The steps encourage product advocates to describe products accurately, establish attainable incremental objectives, diagnose barriers to product installation, select appropriate installation tactics, and evaluate the impact of the tactics. The installation procedure assumes a product, such as a curriculum unit, is on hand, ready for use in a local school or other educational setting. The information in the handbook is designed to increase advocates' understanding of their role and the roles of others who have a voice in deciding to accept or reject an innovative career education product (the client). After the product advocate has determined the key decisionmaker to be influenced, tactics are selected which will communicate the intent of the advocate. The tactics may be informative, persuasive, or coercive, depending upon the situation and the state of knowledge of the client. The handbook is based upon an installation model which assumes interaction between the advocate and those being influenced.

SUBJECT AREA(S)

The *Career Education Product Installation Handbook* (CEPIH) is a product of several disciplines including social psychology, organizational change, innovation diffusion, rural sociology, and educational administration. More specifically, sections of the handbook address topics such as: planning an installation strategy, implementing the stragegy, and assessing the impact of the strategy.

INTENDED USERS AND BENEFICIARIES

The primary users of this handbook are career education project directors in local education agencies. Some use may be made of the handbook by State coordinators of career education as they select local project sites for the diffusion of career education. There are some preliminary indications that the handbook may have some utility as an instructional tool for upgrading skills of project directors, although this use has not been documented by the developers.

GOAL(S) OR PURPOSE(S)

The major purpose of this handbook is to assist career education advocates in the formulation of effective product installation strategies. In order to formulate an installation strategy, a handbook user must be able: (1) To describe the product accurately, (2) to diagnose barriers to the installation process, (3) to plan the strategy within time and cost constraints, (4) to select appropriate installation tactics, and (5) to evaluate the anticipated impact of the tactics on the client.

PATTERNS OF USE

The handbook is self-contained and can be used in a manner consistent with a project director's style and experience. The seven steps leading to the formulation of an installation strategy are sequential, but an experienced project director may bypass sections after becoming more familiar with the handbook. In fact, the descriptions of the tactics can be used separately if the user has accurately identified the product, profiled the client situation, understood the advocate role, planned the installation strategy, and accurately assessed the effects of the previously used tactics. The handbook is intended as an additional resource to the aids already available to the project director.

TIME REQUIREMENTS

The time required to use the handbook will vary depending upon the installation problem to be resolved and the capability of the career education advocate.

IMPLEMENTATION PROCEDURES

The handbook is self-instructional; it requires no special organizational arrangement. A slide-tape presentation designed to orient potential users to the handbook is available from the developers.

ASSURANCES AND CLAIMS

Assurances

The prototype handbook has been used in 23 field sites during the past 6 months without the active participation of the product developer; thus, it appears the product can stand alone and is transportable. Periodic telephone calls were made to the field sites as a means of collecting data on the utility of the product. No evidence of harm due to the use of the handbook was reported to the developer during these phone calls.

No evidence of racial, sexual, or other social biases in the handbook has been reported to date. The field site project directors represented persons of different sexes and racial minorities. A steering committee of national authorities and a revision committee of local career education project directors reviewed the information in the handbook without indicating any evidence of social biases.

Claims

The summative evaluation of the handbook, a simulated installation problem-solving experience for career education project directors, is scheduled for summer 1975; therefore, no claims for improving the performance of career education advocates can be substantiated at this time. However, the developers have listed tentative claims which can be supported or rejected at the conclusion of the summative evaluation. These tentative claims are:

1. Users of the handbook will gain cognitive knowledge of diffusion/installation processes, e.g., the identification of salient characteristics of innovations.
2. Users of the handbook will be able to formulate more effective installation strategies than users of other resource books. For example, handbook users should be able to select diffusion tactics which are appropriate to the problem situation.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Career Education Product Installation Handbook (includes a procedural guide, a set of tactics, and workbook)	1 per product advocate	8.50*	All elements of Handbook are reusable except workbook; new forms needed for each strategy or product	

*Price subject to change.

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

William L. Hull, Program Director and Product Developer

AVAILABILITY

The *Career Education Product Installation Handbook* is under developmental copyright and will be available during fall 1975. Alternative modes for making this product available are being considered. Information on its availability may be obtained from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 060 023

CAREER INITIATION WHEN ALIENATION FROM SECONDARY SCHOOL OCCURS: A REVIEW OF THE LITERATURE

A synthesis of ERIC and other literature on career education programs for secondary school dropouts

A significant proportion of secondary school youths drop out of school without either completing their education or obtaining a salable skill. These youths generally constitute the hardcore unemployed unless some special programs are organized to reclaim their attention and to get them to reassume obligation for supporting themselves through work. This review synthesizes the ERIC and other literature on this topic paying particular attention to career education programs with this purpose.

SUBJECT AREA(S)

The subject areas are dropouts, the disadvantaged, tutorials, cooperative education, and career education.

INTENDED USERS AND BENEFICIARIES

The intended users of this review are practitioners considering introduction of programs to initiate youths' careers when alienation from secondary school has occurred.

GOAL(S) OR PURPOSE(S)

The purpose of this review is to organize and synthesize the literature on the difficulties involved in implementing career initiation when alienation from secondary school has occurred.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

David V. Tiedeman, Coauthor
Anna Miller-Tiedeman, Coauthor

AVAILABILITY

Career Initiation When Alienation From Secondary School Occurs is currently in progress and should be available during summer 1975. Cost of the review is undetermined at this time. Order from:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

INFORMATION CURRENT AS OF MARCH 1975 ■

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RD 060 024

THE CONTINUING EDUCATION UNIT

A book to illustrate forms and procedures needed to implement a continuing education unit

In July 1974, the National University Extension Association (NUEA) published the final draft of *Continuing Education Unit: Criteria and Guidelines*, the product of 6 years of continuous effort of its National Task Force on the Continuing Education Unit. This publication initiated a determined effort on the part of NUEA to get countrywide acceptance of the Continuing Educational Unit (CEU). The NUEA publication only defined the CEU and told how to administer it. The process of gaining acceptance of the CEU demanded further historical and implementation data. The Illinois Community College Board, the College of Continuing Education, Northern Illinois University, Kankakee Community College, and Central YMCA Community College joined with the Educational Resources Information Center (ERIC) Clearinghouse in Career Education in providing this needed historical and implementative context which served as discussion document of a statewide conference on adoption of the CEU.

SUBJECT AREA(S)

Subject areas include noncredit postsecondary extension courses and the Continuing Education Unit (CEU).

INTENDED USERS AND BENEFICIARIES

The intended users of this publication are administrators of extension and other noncredit extension courses.

GOAL(S) OR PURPOSE(S)

The goals of this program are to explain the continuing education unit and its administration and to offer examples of forms and procedures needed in implementation of CEU.

ASSURANCES AND CLAIMS

Prior to publication, the manuscript was submitted to Paul J. Grogan, Department of Engineering, University of Wisconsin-Extension, Madison, Wisconsin 53706, and Keith E. Glaney, Director of Special Programs, The Evening College, Johns Hopkins University, Baltimore, Maryland 21218, for critical review and determination of professional competence. This publication has met such standards.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

Illinois Community College Board
College of Continuing Education, Northern Illinois University
Kankakee Community College
Central YMCA Community College

Anne C. Kaplan, Coauthor
Clive C. Veri, Coauthor

AVAILABILITY

ED 094 213, $0.76 (microfiche), $6.97 (paper), add $0.34 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

A limited number of copies are still available from:
ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 600

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 025

DIRECTORY OF VOCATIONAL INFORMATION RESOURCES IN THE UNITED STATES

A directory of primary vocational information resources in each State

The ERIC Clearinghouse in Vocational-Technical Education, which was merged into the ERIC Clearinghouse in Career Education in 1973, published a 1973 *Directory of Vocational Information Resources in the United States.* The directory reported the location of ERIC microfiche collections, information resources, and the computer software installations for each State. The present directory will update this information as of December 1974.

SUBJECT AREA(S)

The subject area is vocational-technical education.

INTENDED USERS AND BENEFICIARIES

The intended users of this directory are vocational and occupational educators.

GOAL(S) OR PURPOSE(S)

The purpose of this directory is to give vocational and occupational educators a current list of primary information resources in each State.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

Marilyn Schreiber, Editor

AVAILABILITY

The *Directory of Vocational Information Resources in the United States* is currently in progress and should be available in late spring or early summer 1975 from the developer. Cost is undetermined at this time.

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 026

EPIE CAREER EDUCATION S*E*T* (***SELECTION AND EVALUATION TOOLS)

A two-volume guide for the selection and evaluation of career education instructional materials

EPIE Career Education is a two-volume guide for the selection and evaluation of career education instructional materials. Volume 1, *How To Select and Evaluate Career Education Instructional Materials*, explains how to detect sexist and racist content in the materials being offered for sale to schools and what strategies can be applied for countering the effects of these phenomena in the classroom. Another chapter tells how to measure the depth of career "ed'ness" within the instructional design of the materials being considered (such as, goals and objectives, scope and sequence of content, methods/activities, and provisions for student evaluation). The same chapter offers the means by which teachers can answer, "Where does my school stand on career education?" A final chapter describes the evaluation procedures through which some producers put their materials and how to evaluate their results.

Volume 2 contains detailed listings of more than 800 instructional materials, both commercially and locally developed. Materials are listed by grade level within media categories. Appendixes include a special index of developers of career education materials, an index of all materials listed in ascending grade-level order, a list of the career education coordinators from each of the 50 States, and a list of works under development.

SUBJECT AREA(S)

The selection and evaluation of career education materials.

INTENDED USERS AND BENEFICIARIES

The following potential users have been identified and asked to participate as members of an EPIE prototype panel reacting to samples of information in this document. They are career education planners who have the responsibily to purchase materials for their schools or who sit on materials selection committees which make purchasing decisions. These personnel usually are administrators, teachers, and curriculum specialists. It is foreseen, however, that guidance personnel could also make use of these listings in order to provide students with career bibliographies. Librarians in schools with career education programs could make use of these listings for purposes of updating collections in this curriculum area. Naturally students, particularly in grades 7-12 and the postsecondary range, could use this *EPIE S*E*T** as a means of providing themselves with literature on certain occupational clusters in which they have an interest.

The ultimate beneficiaries of this document are the students whose learning will be enhanced by receiving more wisely selected and more sensitively employed instructional materials.

GOAL(S) OR PURPOSE(S)

The individuals using *EPIE Career Education S*E*T** as a source of information when selecting and evaluating materials for career education programs will be able to measurably perceive a change in their approach when considering materials for purchase; they will be more sensitive to the needs of their minority students; they will be more sensitive to the sex role stereotyping which permeates the majority of available materials; they will be more sensitive to the value of various kinds of evaluation procedures (if any) through which producers put their materials; and they will be able to make wiser, more sensitive purchasing decisions.

PATTERNS OF USE

*EPIE Career Education S*E*T** can be used by individuals charged with the responsibility of ordering instructional materials, or it may be used by selection committees—a form of materials selection and evaluation which EPIE encourages. These committees can consist of administrators, teachers, students, parents, school board members, and other members of the community interested in the upgrading of instructional materials in local schools. The *EPIE S*E*T** can also be used by individual students who are searching for information on one or several occupational clusters, specific professions, and/or occupations. It could also be used by dropouts and even inmates of penal institutions as a similar resource.

ASSESSMENT PROVISIONS

Since this is not instructional material as such; no assessment or evaluation provisions have been made. Followup and feedback which EPIE uses to evaluate all its information products will be used for updating this document.

TIME REQUIREMENTS

Time is not a consideration for *EPIE Career Education S*E*T**.

IMPLEMENTATION PROCEDURES

No special procedures or training are required to make the value of this document operational. Although it is not so designed, it could easily be used as a text for a course or workshop in the selection and evaluation of instructional material.

MATERIALS AND EQUIPMENT

The cost of materials has not been determined.

ASSURANCES AND CLAIMS

Assurances

Parts of this product have been given to two separate prototype panels for reaction prior to completion. Their reactions to the usability of the *EPIE S*E*T** were extremely positive for the most part. Questions were raised concerning the assignment of each material to a curriculum role, which in the main was "supplementary for career education." Most of the questions centered around the lack of specificity of this designation. All such questions are valid, since most career education programs in schools are still supplementary to other curriculum areas; therefore, only a few materials carried the curriculum role of "basic for career education programs." As schools adopt career education as the contextual backdrop for the major curriculum areas, the materials developed for such programs will naturally bear more specific roles. Ease of access and usefulness of information in this document have been highly rated by panel members.

This product is free of sexual or racial stereotyping. Indeed, the *EPIE S*E*T** instructs users on how to detect such stereotyping in the materials they are considering for purchase and use. The product offers strategies for countering the effects of such stereotyping in the classroom.

Claims

There are no user data at this time to support any claims for the success of this product. However, a feedback mechanism is being designed as part of this document which will supply data beginning as early as June 1975 and last through the market life of the *EPIE Career Education S*E*T**. These data will be used to improve the quality of any updating volumes EPIE may undertake.

DEVELOPER/AUTHOR:

Educational Products Information Exchange Institute (EPIE)
463 West St.
New York, N.Y. 10014

Sam D. Bittman, Project Coordinator

AVAILABILITY

Copyright is pending.

***EPIE Career Education S*E*T** will be available May 1975 from:**

Educational Products Information Institute
463 West St.
New York, N.Y. 10014

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 060 027

IMPLEMENTATION OF OCCUPATIONAL CLUSTER CONCEPTS

A narrative pertaining to the organizing and synthesizing of literature on occupational clusters

A synthesis of documents announced in *Resources in Education*, *Current Index to Journals in Education*, and *Abstracts of Instructional and Research Materials in Vocational-Technical Education* relating to the 15 USOE occupational clusters. This is the narrative which organizes the content of the previously released *Annotated Bibliography for the Implementation of Occupational Clusters*.

SUBJECT AREA(S)

The subject areas are occupational clusters, occupational education, and career education.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are researchers planning additional research on occupational clusters, curriculum developers undertaking new curriculum development projects on occupational clusters, and practitioners considering implementation of education for occupational clusters.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to organize and synthesize conclusions of the ERIC and AIM/ARM literature on occupational clusters for researchers, curriculum developers, and occupational educators considering the implementation of occupational clusters in their school systems.

DEVELOPER/AUTHOR:

**ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115**

**Joyce Cook, Coauthor
Dale Stenning, Coauthpr
David V. Tiedeman, Coauthor**

AVAILABILITY

***Implementation of Occupational Clusters Concepts* is currently in progress and should be available sometime during summer 1975 from:**

**ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 060 028

THE ROLES OF THE TEACHER, THE COUNSELOR, THE COMMUNITY AND MEDIA IN CAREER GUIDANCE AND CAREER EDUCATION: A CONCEPTUAL MODEL

A document synthesizing ERIC and other literature on roles of teacher, counselor, community, and media in career education programs

Teacher, counselor, community, and media are all necessary participants in the career education of students. This document will synthesize ERIC and other literature on the necessary roles of each of these participants in successful programs of career education. A model will be derived from these role statements.

SUBJECT AREA(S)

The subject areas are teaching, counseling, education and work, career guidance, career education, and computers and other media in career guidance.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are educational practitioners and career educators.

GOAL(S) OR PURPOSE(S)

The goal of this document is to offer a model of the relationship among teacher, counselor, community, and media which must exist in order for career education to work.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

Betty J. Bosdell, Coauthor
JoAnn Harris-Bowlsbey, Coauthor

AVAILABILITY

The *Roles of the Teacher, the Counselor, the Community, and Media in Career Guidance and Career Education* is currently in progress and should be available summer 1975. Cost is to be determined.

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

INFORMATION CURRENT AS OF MARCH 1975 ■

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STRENGTHENING THE RELATIONSHIP OF EDUCATION AND WORK

A synthesis of ERIC and other literature on education and work

In August 1974, President Ford announced his intention, at the Ohio State University graduation, to strengthen the relationship of education and work. The President subsequently ordered his Secretaries of Commerce, Health Education and Welfare, and Labor to recommend ways in which the Federal government could facilitate such a strengthening. The Secretaries reported in late December 1974. ERIC was subsequently asked to organize its literature on this subject. Since education and work are within the scope of the ERIC Clearinghouse in Career Education, the recovery and synthesis of literature on this topic has been assigned to this Clearinghouse.

SUBJECT AREA(S)

The subject areas are education and work, cooperative education, work experience programs, and placement.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are vocational, occupational, and technical educators; community college educators; and businessmen.

GOAL(S) OR PURPOSE(S)

The purpose of this publication is to provide a synthesis of the ERIC and other literature on education and work.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

E. Edward Harris, Author

AVAILABILITY

***Strengthening the Relationship of Education and Work* is currently in progress and should be available in early fall 1975 from:**

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREERS IN TECHNOLOGY

A guide to acquaint students in grades 2-4 with machines and the concept of technology

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of this guide is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, learning activities, and some suggestions for evaluation-summary programs.

The basic purpose of this teacher's guide is to acquaint primary grade students with the variety of jobs in the field of technology. This teacher's guide proceeds from the premise that nothing has had a more profound effect on the goods and services component of our country in the last few decades than technology. The field of technology encompasses all work which uses machines to supply the needs of people. Machines not only contribute to the speed and efficiency of production, but they also make work much easier.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and mathematics.

The topics covered in this guide are: Simple machines, technological jobs in the community, making accurate measurements, tools used for measurement, preparation related to technological jobs, the use of mathematics in technological jobs, job specialization and the assembly line, a visit to a technological site, and working conditions.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 2-4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify the tools and six simple machines and be able to name the occupation of a person who uses each machine; (2) become aware of and acquire knowledge of various technological jobs and careers that are necessary to a community through direct observation and classroom discussion of these jobs, recognizing the interdependency of community functions and roles; (3) recognize by observation and class activity that many technological jobs require accuracy and efficiency in measurement, and identify the unit of measurement used in technological jobs; (4) become familiar with and know the function of measuring tools and be able to associate specific measuring tools with specific technological jobs; (5) develop an understanding of how the school-related disciplines of mathematics, science, communications, and art are used in some jobs and the type of education required for different careers; (6) recognize division of labor in the manufacturing process by observing the working conditions on an assembly line; and (7) recognize that work locations and working conditions differ and understand the implications of automation for workers of the future.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

RD 070 001

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Careers in Technology	1 per teacher	6.00	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Careers in Technology* is available from:

**Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

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INFORMATION CURRENT AS OF MARCH 1975 ■

EXPLORING THE WORLD OF WORK

A guide to acquaint students in grades 2 and 3 with occupational areas

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The guides relating to this theme can be categorized as those that focus on career awareness and exploration of specific careers in the work world and those that concentrate on concepts and terms like worker roles, production methods, work habits and performance standards, production, management, goods and services, and worker satisfaction.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies, art, and language arts.

The topics covered in this program are an introduction to the world of work, goods-producing occupations and service occupations, occupational areas and specialization, preparation for occupations, meeting personal needs through work, lifestyles in occupations, occupations that help meet community needs, volunteer programs, and jobs unique to a given geographic area.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 2 and 3.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Become familiar with goods-producing occupations and service occupations; (2) be able to make distinctions between different types of occupations; (3) be able to describe specialized jobs within each of these areas; (4) be able to identify the importance of school tasks and other kinds of training as preparation for the world of work; (5) be able to identify personal needs and the way these are met through work; (6) be aware of the importance of work as a determinant of lifestyle; (7) identify community needs and how these are met by community workers; (8) be able to define the concept of "volunteer" and identify some of the services provided by volunteers; and (9) be able to identify occupations specific to a given geographic area as a means of increasing students' understanding of the influence of geographic conditions on occupations.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In

most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Exploring the World of Work	1 per teacher	6.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Exploring the World of Work* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREER EDUCATION CONCEPT LESSON CARDS

A program to provide career awareness to students in grades K-6

The *Career Education Concept Lesson Cards* provide a basic career awareness program for students in kindergarten through grade 6. The K-6 program is organized around "Who Am I?," "To Develop an Awareness of Others," and "To Develop an Awareness of Others and Occupations."

Teachers write lessons, implement them in the classroom, and evaluate and revise these instructional curriculum modules.

These lessons encompass classroom learning activities and projects, the use of audiovisual materials, and field trips into the community; they also provide for guest speakers and community visitors to visit the classroom. Parents and other community members can be used as classroom aides and trip chaperones.

The community is looked upon as a classroom, and the product uses both natural and social life-space phenomena for instructional purposes. The career education lessons enable students to be active participants in their education.

SUBJECT AREA(S)

The subject area of this product is career education.

INTENDED USERS AND BENEFICIARIES

The K-6 program is immediately applicable to those students who attend Union 58 schools in Groveton, Stark, and Stratford, New Hampshire.

Teachers are directly involved in writing lessons and introducing them into the classroom. The lessons are student oriented and directly involve students in the awareness/learning process regarding the world of work.

The scope of the program is to affect student awareness and attitudes of students of all abilities in Union 58, grades K-6.

GOAL(S) OR PURPOSE(S)

The purposes of the program are: (1) To expose students to a variety of occupations, (2) to enable students to investigate different occupations and learn more about them, and (3) to enable students to better understand the training and skills necessary to do a particular job.

PATTERNS OF USE

The organizational pattern of the lessons provides for specific concepts and occupations to be treated in grade groupings. The lessons are organized on a grade-grouping basis to enable them to be evaluated, revised, and rearranged without seriously affecting the structure of the K-6 program.

As developed in K-6, the lessons apply to several subject matter areas (e.g., social studies, science, language arts, and mathematics) and can be infused into these courses of study without drastically altering the established curriculum.

The lessons can be used at three different stages of instructional development:

(1) Introductory Phase—This introduces a lesson or unit in a particular subject matter area.

(2) Integration—The career education lesson is infused into the subject matter content and becomes part of the course of study and activities.

(3) Culminating Phase—The lesson can be used as a culminating activity as part of a subject matter course of study.

ASSESSMENT PROVISIONS

Initially, the component coordinator met with K-6 teachers to outline the concept lesson format. Working with teachers in the classroom, the coordinator assisted teachers in developing their own lessons. Teachers introduced the lessons into their classrooms and evaluated them (on the enclosed evaluation form). The coordinator observed many lessons in classrooms.

TIME REQUIREMENTS

Each lesson card contains a statement of time required to develop the instructional activity. The time required to develop a lesson varies with each lesson.

IMPLEMENTATION PROCEDURES

Instructional materials (filmstrips, self-awareness kits, and magazines) have been purchased from several commercial publishers.

The average classroom teacher without special training can prepare lessons which relate to different subject matter areas.

The infusion of career education lessons into the existing curriculums does not require extensive organizational or scheduling changes. Developed career education lessons can be implemented in the classroom and/or community.

MATERIALS AND EQUIPMENT

Each career education concept lesson suggests several different types of materials and instructional activities that can be used.

RD 070 003

The individual teacher has the option to use whichever materials wanted in order to develop the lesson. There is no set pattern of lesson development. Using this approach, the career education lessons can be implemented in most, if not all, classrooms in a given school setting.

ASSURANCES AND CLAIMS

The ESP project staff and Union 58 classroom teachers have developed K-6 career education lessons for the purpose of exposing students to a wide variety of occupations and increasing student awareness of the world of work. Teachers have introduced lessons into their classroom curriculums and have provided feedback regarding the purpose and value of the lessons. The Union 58 ESP's level I evaluator has been involved in developing the feedback form and is currently conducting career awareness and maturity inventory testing in classrooms. To date, there are not sufficient data to allow this project to make any assurances of harmlessness.

The Union 58 ESP *Career Education Concept Lesson Cards* have been produced by the project staff and classroom teachers with all students in mind. There has not been any intention to develop a sexist program. Both boys and girls are involved in lesson activities.

As developed, the concept lessons could be replicated or transported to other sites and infused into the classroom curriculum.

There are not sufficient data available at this time to enable the Union 58 ESP project to make any claims of effectiveness, social fairness, or product development.

DEVELOPER/AUTHOR:

New Hampshire School Supervisory Union 58
Experimental Schools Program
Groveton, N.H. 03582

Richard Peters, Project Director
Paul Hawley, Coordinator
Union 58 Teachers

AVAILABILITY

The original intention of the Union 58 ESP project was to develop a comprehensive and integrated K-12 career education program for students in Groveton, Stark; and Stratford, New Hampshire. This is still the project's prime mission. Only within the past few months have the project personnel and classroom teachers been able to develop a product tailored to local abilities and needs. At this time, the Union 58 project has no plans to publish.

The development of the career education concept lesson program for K-6, as well as for grades 7-12, is an ongoing process which involves development, implementation, evaluation, and revision.

The product has not been copyrighted. Samples of the developed lessons are available from the New Hampshire School Supervisory Union 58 Experimental Schools Program project:

Experimental Schools Program
Groveton Elementary School
Groveton, N.H. 03582

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 004

BASIC MEASUREMENT AND RELATED CAREERS: A

Material for kindergarten children on topics of time, weight, money, and length

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The four *Basic Measurement and Related Careers* guides were developed for students in early and late primary grades. They focus on the basic concepts of measurement and on developing measurement skills in the early grades; they progress from understanding the concept of measurement by comparison to developing basic volume measurement skills. Students examine the use of these skills in the work world.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is mathematics.

The topics covered in this guide are: Time, weight, money, length estimation, and length measurement.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in kindergarten.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts. The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Estimate short time spans, begin learning to read a clock by identifying activities that are performed at certain times, and understand that people organize their activities around time; (2) compare relative weights of objects, determine how much weight an object will support, and identify situations in which workers might apply these concepts; (3) understand that money is a medium of exchange, recognize three coins and understand their relative values, learn what certain items cost, and identify work situations in which money measurement is necessary; and (4) compare relative lengths of objects, sequence objects by length, recognize the practical value of length estimates, make length estimates, and identify situations in which workers might make length estimates.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

RD 070 004

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Measurement and Related Careers: A	1 per teacher	5.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Basic Measurement and Related Careers: A* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

BASIC MEASUREMENT AND RELATED CAREERS: B

RD 070 005

Topics for 1st graders including measuring, time, weight, money, length, and volume

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The four *Basic Measurement and Related Careers* guides were developed for students in early and late primary grades. They focus on the basic concepts of measurement and on developing measurement skills in the early grades. In addition, they progress from understanding the concept of measurement by comparison to developing basic volume measurement skills. Students examine the use of these skills in the work world.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is mathematics.

The topics covered in this guide are: Measuring time, weight, money, length, liquid volume, and temperature.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grade 1.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Explore ways in which people use time measurement skills in work and everyday living and begin learning to read a clock and (2) recognize the relationship between similar school and work experiences by developing skills in weight, money, length, liquid volume, and temperature measurement through discovering how people use the same skills in work.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Measurement and Related Careers: B	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

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Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 006

BASIC MEASUREMENT AND RELATED CAREERS: C

A teacher's guide for teaching 3d- and 4th-graders to relate measurement skills to work experiences

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The four *Basic Measurement and Related Careers* guides were developed for students in early and late primary grades. They focus on the basic concepts of measurement and on developing measurement skills in the early grades. In addition, they progress from understanding the concept of measurement by comparison to developing basic volume measurement skills. Students examine the use of these skills in the work world.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is mathematics.

The topics covered in this guide are: Examining measurement tools and their relationship to work by using estimation, length measurement, and area measurement in work situations; and applying measurement skills.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 3 and 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Recognize the need for and use of standardized measurement tools and become aware of their use in the world of work, (2) be able to use estimation skills as a means of developing competencies required for the world of work, (3) be able to use basic length and area measurement skills as a means of developing competencies required for the world of work, and (4) use measurement tools and skills in a simulated work experience.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Measurement and Related Careers: C	1 per teacher	7.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Basic Measurement and Related Careers: C* is available from:

Product Utilization Section
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Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 007

BASIC MEASUREMENT AND RELATED CAREERS: D

A teacher's guide for teaching 3d- and 4th-graders to measure solid and liquid volume

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains a student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The four *Basic Measurement and Related Careers* guides were developed for students in early and late primary grades. They focus on the basic concepts of measurement and on developing measurement skills in the early grades. In addition, they progress from understanding the concept of measurement by comparison to developing basic volume measurement skills. Students examine the use of these skills in the work world.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is mathematics.

The topic covered in this guide is measuring liquid volume and solid volume.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 3 and 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: Identify units of solid and liquid volume measurement, determine equivalent units, begin understanding conservation of liquid volume, identify workers who measure liquid volume, and demonstrate the measurements.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Measurement and Related Careers: D	1 per teacher	4.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

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Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREERS IN VISUAL ART

A guide to acquaint students in grades 4-6 with some great achievements in fine art

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This set of learning experiences acquaints intermediate-level students with some of humanity's great achievements in the fine arts. With heightened perception, the students observe possibilities for artistic expression in their immediate environments. They explore a variety of careers in the graphic arts; and as a result, they become aware of the tools, materials, and equipment, as well as the skills needed to utilize them. Through group activities in the graphic arts, the students see the advantages of cooperation and develop an understanding of decisionmaking and problem solving.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is art.

The topics covered in this guide are: An introduction to visual arts, art all around us, variety of careers in art, cultural and environmental influences in art, art as a cooperative effort, tools and materials used by artists, the skillful use of art equipment, skills related to job success, working conditions in the field of art, and lifestyle and rewards associated with the visual arts.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 4 - 6.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Become acquainted with works representative of the major categories of graphic art (painting, sculpture, architecture, design, and photography); (2) achieve heightened visual perception and develop both an awareness and sensitivity to all that is artistic in their immediate environment and in their everyday world; (3) investigate certain occupations in graphic arts by talking with persons actively employed in jobs using artistic ability; (4) acquire an understanding of their own cultural heritage as expressed in art and appreciate the contribution of various ethnic groups; (5) participate in group arts-related activities for the purpose of learning to recognize and appreciate the interdependence of all contributors to a successful art project; (6) understand the wide variety of tools, materials, and equipment used by workers in graphic arts-related occupations; (7) be able to use the necessary tools and demonstrate some of the skills or techniques required of an artist; (8) develop an awareness that working conditions affect the productivity of people in arts-related jobs as well as experience different working conditions for themselves; and (9) recognize that there are certain conditions inherent in art careers that may affect the lifestyle of the artist, and identify the tangible and intangible career rewards.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Careers in Visual Art	1 per teacher	6.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

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Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREER EXPLORATION IN EARTH SCIENCES

A guide to introduce students (grade 8) to the earth sciences

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration. The guide consists of sets of learning experiences for students that focus on various elements of education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This teacher's guide acquaints intermediate-grade level students with occupations in the earth sciences. By identifying earth science and involving students in an exploration of the areas of geology, meteorology, and oceanography, students may become aware of the knowledge and skill required of workers in these occupations. An important aim of this guide is to involve students in the learning process by providing "hands-on" experience.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are geology, meteorology, and oceanography.

The topics covered in this guide are: Earth science; geology—the study of rocks; geology—investigating minerals and fossils; geology—forces that alter the earth's surface; meteorology—an area of earth science; oceanography—an area of earth science; and interaction among earth science occupations.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grade 8.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The student completing the learning sets in this program will: (1) Identify the earth sciences and investigate occupations in geology, meteorology, and oceanography; (2) investigate the origin and composition of rocks and simulate activity of geologists and workers in related occupations as a basis for realizing how geologists interact with other workers; (3) examine minerals and fossils and identify the basis of their classification as a means of understanding how the methods of earth scientists can be used to solve practical problems; (4) identify and investigate some forces that alter the earth's surface as an aid to understanding the work done by soil scientists; (5) identify the science of meteorology and related occupations and conduct experiments with self-made instruments as a basis for understanding the elements of weather and weather forecasting; (6) identify the scope of oceanography, the properties of sea water, and some oceanographic instruments in order to realize how and why scientists study the oceans; and (7) differentiate between hypothesis and theory and investigate the "Theory of Continental Drift" as a basis for understanding how earth scientists cooperate in formulating a theory.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

RD 070 009

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Career Exploration in Earth Sciences	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Career Exploration in Earth Sciences* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREER EXPLORATION IN THE LIFE SCIENCES

A guide to acquaint students in grades 7-9 with ecology, zoology, and medicine

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This guide familiarizes intermediate-grade students with those occupations in the life sciences. By identifying life science and exploring the areas of biology—ecology, zoology, and medicine—students may become aware of the functions of life scientists in these fields and the value of their work.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are: Ecology, medicine, zoology, and biology.

The topics covered in this guide include: Biology (ecology), biology (zoology), medicine, and a definition of life science.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 7-9.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify the scope of life science and the three basic fields of agriculture, biology, and medicine in order to become aware of the variety of life science occupations; (2) identify the life science of ecology and the factors affecting the environment as a basis for understanding the function of ecologists and people in related occupations; (3) investigate animal life as a means of learning the functions of zoologists and the value of work in this area of life science; and (4) identify life scientists who are concerned with the cause and cure of diseases and disorders of the human body, and become aware of the functions of these life scientists.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Career Exploration in the Life Sciences	1 per teacher	5.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

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Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 011

CAREER EXPLORATION IN THE PHYSICAL SCIENCES

A guide to acquaint 9th-graders with chemistry, physics, geology, metallurgy, and general science

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This guide acquaints secondary students with the areas of physical science and those occupations associated with that area of study. By exploring some of the basic concepts of chemistry, physics, metallurgy, and geology, students gain insight into the knowledge and skills required of those in occupations related to the physical sciences.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are: Chemistry, physics, geology, metallurgy, and general science.

The topics covered in this guide are: Nature of physical sciences, measurement tools, physics—an area of physical science, chemistry—an area of physical science, metallurgy—an area of physical science, geology—an area of physical science, and interaction of workers in the physical sciences.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grade 9.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify the scope of physical science and the areas within it as a means of understanding the functions of people in physical science occupations, (2) identify the uses of various measurement tools of physical scientists and the skills required in their use as a means of recognizing the criteria used in selecting the appropriate tool for a given measurement, (3) examine some basic principles of physics and conduct-related experiments to understand how theoretical principles may be applied in the world of work, (4) examine the properties of various materials and conduct experiments in chemical reactions as a means of understanding bases for classifying matter, (5) identify the two basic areas of metallurgy and conduct related experiments in order to understand the functions of metallurgists, (6) investigate the origin and composition of rocks and minerals and the forces altering the earth's surface as a basis for understanding the functions of various geologists, and (7) perform simulated activities of geologists and those in related occupations as a basis for realizing how physical scientists interact with each other and with other workers in work situations.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

RD 070 011

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Career Exploration in the Physical Sciences	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Career Exploration in the Physical Sciences* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 012

ELEMENTS OF COMPUTER CAREERS

A course teaching high school students how people operate and use computers

Elements of Computer Careers has been designed to provide high school students with a clear picture of how people operate and use computers. It includes separate units, complete with real experiences, on the major job categories in the computer field—data preparation, computer operation, computer programing, systems analysis, systems programing, and computer center management. A seventh unit presents an overview of business, education, and science approaches to computers.

After completing the units, the student will have enough experience to be able to decide whether this is a career direction that would be desirable to follow. For the jobs which do not require advanced training, this program will give the students enough orientation to confidently seek positions directly out of high school—if these positions are ones that don't require advanced training.

The teacher serves more as an adviser than as a teacher. The students actually operate the computer center and provide services to the school. Each student assumes one of the roles described in the units, e.g., one student will be center manager, one will be an operator, some students will be systems analysts, some will be programers, some keypunch operators. During the year, some students will have functioned in several roles.

SUBJECT AREA(S)

The subject area is career education; specifically computer technology.

INTENDED USERS AND BENEFICIARIES

The intended users are students in secondary schools, community colleges, and vocational-technical schools.

GOAL(S) OR PURPOSE(S)

The major goals are to provide students with the necessary experience to determine whether they would like to pursue a career in the computer technology field, and to provide schools with a plan for operating their own computer center, with students doing most of the work while they are learning about computer technology as a career field.

PATTERNS OF USE

The units have been designed for wide flexibility in use so that they may fit into many different class situations. Ideally, they should be studied in the numbered sequence. Specific units, however, may be read either out of order or in isolation—if the students' interest or class structure calls for it. Depending on the circumstances, students may also branch out of sequence at certain points to pursue a particular occupational area in some depth. Lists of supplementary resources for further study are given in each area. In addition to flexibility in the sequence of study, these units have also been designed for maximum flexibility in terms of course structure and computer access. The first mode of use is in a full-year career orientation course, for which the units were originally designed. The second possible structure is in a one-semester career orientation course. The third mode is independent study.

Mode One—Full-Year Career Orientation

The *Elements of Computer Careers* units have been structured for optimal usage in the full-year course. In this mode, the manuals provide basic instruction in the six primary career jobs. As students complete specific units, opportunities for becoming proficient in the specific job should be provided.

The activities for the full-year course should include outside reading, films, field trips, and outside speakers. In this mode, the course may be a full course totally devoted to career orientation, or the materials may be used as the focus of an already existing introduction to computers course. The fullest use of the course in this mode can be gained with hardware consisting of a computer, an input device to read paper tape, punched cards and mark-sense cards, a printer, and a control console. In the case of computer equipment on the site, students and teachers will have to make efficient use of schedules to insure that all students have access to the equipment when they need it.

If only teletypewriter access is available, everything except the assignment of roles in the computer center for "hands-on" experience can still be done. While there will be less flexibility in languages available, access to a teletypewriter still makes a wide range of projects possible.

Mode Two—One Semester Career Orientation

Used as the basis for a one-semester course on computer careers, the units can provide a complete series of instructional materials. This course should provide sufficient practical experience with the elements of each job so that students will know how much interest and aptitude they may have for this field. Where computer equipment is available, the students can still have the experiences of working with it in the various roles. Projects would need to be on a smaller scale, and less time would be available for using outside resources or for students to pursue particular areas of interest.

Mode Three—Independent Study

Depending on the circumstances, one or more of the units may be studied on an independent basis. In this mode, students may follow the entire sequence of units and take advantage of any and all opportunities for laboratory experiences made possible by the equipment available. When this series is used in this mode, students must be sure to schedule use of the equipment with the teacher or computer operator ahead of time.

In the situation where no computer access is available, successful independent use of these units can still occur with the student concentrating on the study questions and the sample laboratory exercises which require only pencil and paper.

ASSESSMENT PROVISIONS

Tests are available at the end of each unit.

TIME REQUIREMENTS

Time required depends on the mode of study chosen. It is either a one- or two-semester course.

IMPLEMENTATION PROCEDURES

It is desirable to have a computer center with a minicomputer, data preparation devices (e.g., keypunch), work space for students, and terminals that can be used in the different classrooms.

A teacher needs to be familiar with the materials. (See "Patterns of Use" for the procedures to use depending upon mode of study.)

ASSURANCES AND CLAIMS

Assurances

No danger or hazard was reported during the testing of this course.

During the preparation of this book, attempts were made to eliminate any bias toward sex, race, religion, age, or socioeconomic stereotypes.

In the minimum mode of instruction, only the book itself is needed for the course. Adaptation of other described modes require computer access and, therefore, might have more limited replicability.

Claims

Elements of Computer Careers was tested in the field at three different sites, and revisions were made based on feedback from the users. Additional revisions were made based upon recommendations of the publisher.

Field testing showed the following results:

1. The unit test results indicate that the full-access mode is the most effective in causing gains and meeting mastery criteria. However, it should be noted that no control group was present, and thus the assertion cannot be made unequivocally.
2. The course is flexible and self-sufficient, providing the teacher is familiar with the user's guide.
3. The teachers generally approved and praised the course and planned to use it in future classes.
4. Students were generally enthusiastic about the course, with the exception of unit 2.
5. The greatest need for improvement lies in the unit tests.
6. The course is less effective in modes in which students have access to only a terminal or have no access at all.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Elements of Computer Career (7 units)	1 set per student	To be announced		Prentice-Hall, Englewood Cliffs, N0J0 07632
Computer with associated equipment (desirable)				Implementer

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. Second Ave.
Portland, Oreg. 97204

Duane E. Richardson, Program Director
Judith B. Edwards, Major Author
Antoinette S. Ellis, Editor

AVAILABILITY

The *Elements of Computer Careers* will be published late 1975 or early 1976 and will be distributed by:

Prentice-Hall, Inc.
Educational Book Division
Englewood Cliffs, N.J. 07632

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 013

ECONOMIC AND CAREER AWARENESS: A

A guide to provide students in grades 1-4 with an awareness of the family as an economic unit

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

Designed for primary grade students, the learning activities in this guide focus on developing awareness of the family as an economic unit with basic economic needs. Students become aware that needs vary from family to family. They explore the concepts of earning, planning, and saving as they consider satisfaction of economic needs.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and mathematics.

The topics covered in this guide are: The family as an economic unit, money used to buy things, earning, spending, and saving, planning to buy, and the relationship between ability to buy things and work.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Develop an awareness of the family as an economic unit through understanding the distinction between goods and services, recognizing the difference between needs and wants, identifying family needs and wants that can be satisfied through money, and recognizing the variations of needs and wants that occur from family to family and individual to individual; (2) acquire basic consumer skills through identifying the relative costs of goods and services and the relative value of coins, reading prices and counting coins for small purchases, and recognizing when more money is needed than is available for a purchase; (3) increase economic awareness and develop financial decisionmaking skills through recognizing that people earn money for doing work, realizing that there are reasons for saving money rather than spending it for immediate reward, and learning to choose between alternatives and to follow a savings plan; and (4) become aware of the consumer skills involved in recognizing and making use of basic criteria for planning purchases, knowing how to get the information needed to apply these criteria, and knowing what to do when something goes wrong in the making of a purchase.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Economic and Career Awareness: A	1 per teacher	6.50	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Economic and Career Awareness: A* is available from:

**Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 014

ECONOMIC AND CAREER AWARENESS B

A guide with an emphasis on consumer knowledge, for grades 1-4

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This guide places emphasis on consumer knowledge. Students in primary grades delve into the ideas of using money to facilitate trade; practice skills that help minimize expenses such as reading price tags or counting change; and gain experience in earning, saving, spending, and family budgeting.

The function of a bank and its workers is explored in detail.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and mathematics.

The topics covered in this guide are: Exchanging things in a store; using coins and counting change; earning, saving, and spending money; banking and bank workers; and planning for family spending.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify forms of economic exchange and recognize that trading by barter can sometimes be inconvenient and that money facilitates trade; (2) increase self-sufficiency in making purchases and handling money through counting coins, making change for purchases of a dollar or less, and finding and reading prices; (3) identify a variety of ways students can earn and spend money; relate pay, earning, and spending to performing jobs; choose and perform a job for "pay"; and plan, save for, and make purchases; (4) develop an awareness of banking institutions, the workers banks employ, and the work performed there, and relate worker tasks to skills learned in school; and (5) relate expenses to the family unit or to individuals within the family unit, identify regular and occasional family expenses, recognize that most family income is spent on needs and regular expenses, and identify ways in which families and family members can use their money wisely.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Economic and Career Awareness: B	1 per teacher	4.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Economic and Career Awareness: B* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 015

ECONOMIC AND CAREER AWARENESS: C

A guide to familiarize students in grades 1-4 with basic economic terms and concepts

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

Students at the primary grade level develop familiarity with basic economic terms and concepts, including those relating to the consumer. They investigate services offered by banks and also study money substitutes.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and mathematics.

The topics covered in this guide are: Elements of economic planning, long-range economic planning, a definition of "producer" and "consumer," money substitutes and their uses, the functions of a bank in the community, and the ways in which people earn money through careers.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts. The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify some basic economic terms—consumer, goods, services, needs, and wants—and understand their relationships to each other; (2) identify some basic elements of economic planning and learn to make decisions based on examination of these criteria; (3) become acquainted with the idea of long-range economic planning and some of its attendant concepts—mixed and variable expenses, seasonal variations in purchases and expenses, budgets, decisionmaking, maintaining goods already owned, and saving money to satisfy long-range goals; (4) distinguish between "consumer" and "producer" and become familiar with the production of both goods and services and the three stages in the production cycle—planning, manufacture, and distribution; (5) become aware of the services offered by banks and understand a variety of banking terms—savings account, checking account, deposit, withdrawal, teller, safe-deposit box, loan, and interest; (6) become aware of the existence of various money substitutes and the occasions in which each of these is most effectively used; and (7) become aware of the existence of a variety of occupations and career fields and understand that many require special aptitudes, training, and equipment.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Economic and Career Awareness: C	1 per teacher	5.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Economic and Career Awareness: C* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 016

COMMUNITY SERVICE WORKERS

Materials to acquaint primary grade students with services performed by various workers in the community

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

Students in the primary grades become acquainted with services performed by various workers in the community. After the identification of community service workers and the tasks they perform, emphasis is placed on the need for cooperation among workers in completing tasks. Students consider the concepts of "responsibility" and "dependability" as related to "getting the job done."

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is social studies.

The topics covered in this program are services performed by community workers, cooperation among workers, responsibilities of community service workers, effective interviewing techniques, and interviewing community workers.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grade 2.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Develop an awareness of the world of work through understanding of the jobs that many workers perform in providing various services to the community, (2) realize that the successful completion of one job allows another job to be done (cooperation among workers), (3) explore the concept that people in the community depend upon workers to perform certain services (the consequences of responsibilities), and (4) determine what kinds of questions to ask during an interview and actually interview community service workers.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Community Service Workers	1 per teacher	3.00	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Community Service Workers* is available from:

**Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 017

CAREER EXPLORATION THROUGH MATHEMATICS

A guide for career education teachers helping students in grades 8-10 to develop and reinforce mathematical skills

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The learning experiences in this teacher's guide help students at the secondary level to develop and reinforce mathematical skills and to become familiar with a wide range of occupations. Each student is encouraged to assess personal attributes, including competencies in mathematics; to establish tentative occupational goals; and to set some guidelines for high school curriculum planning.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are mathematics and guidance.

The topics covered in this guide are: Occupational information; personal attributes affecting occupational choice; understandings and skills with whole numbers, fractions, ratios, and percents, perimeter, area, and volume determination; and planning a tentative course of study.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 8 - 10.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the early classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Examine and discuss various sections of *Dictionary of Occupational Titles* and interpret and incorporate data from this source in several occupational studies as a means of developing career awareness; (2) assess personal attributes and compare them with worker traits for a particular occupation as a means of developing an awareness that personal attributes influence occupational success; (3) perform mathematical operations involving the concepts of whole number addition, subtraction, multiplication, division, ratios, percents; and perimeter, area, and volume as a means of acquiring basic competencies for a variety of occupations; and (4) establish occupational goals on the basis of current interests and perceived personal attributes and plan a tentative course of high school study as a step in attaining these goals.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Career Exploration Through Mathematics	1 per teacher	11.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Career Exploration Through Mathematics* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 018

MATHEMATICS AND RELATED CAREERS: B

A guide to help students in grades 9 and 10 to develop and reinforce mathematical skills

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The learning experiences in this teacher's guide help students at the secondary level to develop and reinforce mathematical skills and to become familiar with a wide range of occupations. Each student is encouraged to assess personal attributes, including competencies in mathematics; to establish tentative occupational goals; and to set some guidelines for high school curriculum planning.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are mathematics and social studies.

The topics covered in this guide are property taxation and price indexes.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 9 and 10.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will solve numerical problems confronting specific individuals who deal with the relationships between market value, assessed value, tax rate, property tax, and price indexes.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Mathematics and Related Careers: B	1 per teacher	3.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Mathematics and Related Careers: B* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 019

CREATING GREETING CARDS: A BUSINESS BRINGS PLEASURE

A guide which allows students (grades 2-4) to participate in the creation and production of greeting cards

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The learning experiences in this teacher's guide provide students at the primary level with the opportunity to participate in the creation and production of greeting cards. Students explore different kinds of cards and simulate the production process of a greeting-card company. Students learn about greeting cards as a form of communication as well as the cooperative effort required for mass production. As students learn by doing, they develop an appreciation for the habits and skills related to completing a task. These habits and skills include adequate preparation, orderly approach, meeting responsibilities and performance standards, safe work habits, physical skills, recurring production needs, and creativity.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are arts, language arts, applied mathematics, and social studies.

The topics covered in this guide vary as follows: A different card for each occasion, the concept of production sequence, the sequence of tasks within production, safety and work skills, and mass-producing greeting cards.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 2-4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Apply background information in categorizing greeting cards as a means of gaining awareness that adequate preparation contributes to success and confidence in task performance, (2) place pictures of greeting-card production in proper sequence as a means of better understanding the production process, (3) portray a reason for task sequence as a means of demonstrating that success in many tasks depends on meeting performance standards, (4) draw a picture of a task group safety practice as a means of demonstrating awareness of the need for safety on the job, (5) perform production tasks with increasing accuracy or control of psychomotor movements as a means of developing physical skills needed in the work world, and (6) communicate a message creatively and appropriately as a means of developing creativity in work.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Creating Greeting Cards: A Business Brings Pleasure	1 per teacher	5.00	Reusable	

DEVELOPER/AUTHOR:

**Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

Robert E. Ta[illegible]r, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Creating Greeting Cards: A Business Brings Pleasure* is available from:

**Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 020

LEARNING ABOUT BUSINESSES

A guide to help primary grade students understand interrelationships among businesses, workers, and families

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

In this teacher's guide, the learning experiences focus on helping students in primary grades develop their understanding of the interrelationships between businesses, workers, and families by means of an analysis of local stores and businesses and an examination of the workers who work in them. Students are given the opportunity to acquire economic awareness and self-sufficiency. They learn to match needed goods and services to the types of stores and businesses that provide them. They identify and explore the basic business principles of income; expenses; and dependence on workers, customers, and other businesses.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is social studies.

The topics covered in this guide include: The way in which businesses provide families with goods and services; the functions that customers, workers, and some businesses perform with relation to a particular business; the nature of a business itself; the different types of jobs within a particular business; and the procedures required in operating a small business.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Recognize that businesses exist to fill needs or wants for goods and services; (2) recognize that businesses have incomes and expenses; (3) identify the components of a business (activities, objectives, location, facilities, equipment, expenses, customers, suppliers, related businesses, advertising, and benefits to workers); (4) understand that people perform a variety of jobs in businesses and that specific businesses may be described by examining the work performed and the skills used; (5) understand that different jobs require specific aptitudes, interests, and temperaments; and (6) appreciate the relationships between educational experiences and preparation for careers by applying basic computational skills.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learning About Businesses	1 per teacher	7.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Learning About Businesses* is available from:
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 021

MAKING TOYS THROUGH TEAMWORK

A guide to acquaint students in grades 4-6 with wood construction and mass production

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

In this guide intermediate level students engage in learning experiences intended to acquaint them with wood construction and mass production. In addition to developing carpentry skills, students learn the safe use of tools, equipment, and materials. They simulate a toy company and inductively develop processes for mass production of toy boats and apply marketing principles. In addition, students learn general work-related skills as well as task planning, interpersonal relations, individual and group work methods, applied mathematics, and decisionmaking.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are art, social studies, language arts, and mathematics.

The topics covered in this program are an introduction to wood construction, building an individual project, group design and construction, designing working drawings and making a market survey, introduction to mass production, solving company problems, mass production in practice, and relating wood-construction knowledge to occupations.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 4-6.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Draw, describe, practice, and display correct and safe use of tools, equipment, and materials as a means of demonstrating an understanding of basic wood construction; (2) develop and use a work plan for making a wood product in order to become familiar with the requirements of task planning and to develop positive feeling toward work done individually; (3) simulate a toy factory as a means of recognizing and developing social skills and production methods appropriate for group work; (4) make a working drawing of a sample toy boat as a means of developing mathematical skills useful in the work world; (5) show the use of division of labor, tools, and skills as a means of demonstrating an understanding of mass production; (6) use an application form as a means of recognizing that interests and skills influence career decisions; (7) work on an assembly line as a means of recognizing and developing effective health and safety habits for teamwork, and reassess toy designs and assembly-line tasks as a means of incorporating creativity in teamwork; and (8) pretend to seek a position relating to wood-construction knowledge as a means of understanding the cause-and-effect relationship between job experience and future employment.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Making Toys Through Teamwork	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Making Toys Through Teamwork* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 070 022

THE SUPERMARKET

A guide to acquaint students in grades 2-4 with the food industry

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of this guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The learning experiences in this teacher's guide are intended to acquaint primary grade students with the food industry—the goods and services it provides, the workers it employs, and some of the basic skills the consumer needs. The supermarket, which is considered to be the segment of the food industry most familiar to primary students, is the focal point of study. As they observe and interview supermarket workers on the job, students gain some understanding of the job activities and working conditions. Sound consumer habits are developed as students apply arithmetic and reading skills in making shopping decisions and play the roles of customers and supermarket workers in a culminating activity.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and mathematics.

The topics covered in this program are: An introduction to the supermarket, supermarket departments, supermarket workers, supermarket tools and equipment, supermarket suppliers, and consumer skills in the supermarket.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 2 and 3.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Identify the types of goods, services, and jobs the supermarket provides in order to develop an awareness of the importance of the supermarket to the community; (2) classify supermarket products and create a floor plan arrangement as a means of developing an understanding of the departmental organization of the supermarket; (3) identify supermarket workers and the tasks they perform and relate each job to the operations of a particular department with respect to working conditions as a means of developing career awareness; (4) identify supermarket tools, equipment, and materials and explain or demonstrate their use; (5) identify food sources and methods of processing and distribution, and trace the histories of several products from their origin to their arrival at the supermarket; and (6) apply arithmetic and reading skills in making shopping decisions as a means of developing sound consumer habits.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Supermarket	1 per teacher	4.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *The Supermarket* is available from:
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 023

THE SERVICE STATION

*A guide to acquaint 2d-graders with the service station
as part of the community*

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

In this guide, students at the primary grade level are encouraged to expand awareness of jobs within the community. The role of the service station worker within the community is examined with special emphasis on the goods and services provided.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies, art, and language.

The topics covered in this product are: The service station in the community, goods obtained at the service station, services available at the service station, paying for goods and services at the service station, equipment used at the service station, and the ways in which service station workers help people.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grade 2.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The student completing the learning sets in this program will: (1) Identify items that can be bought at the service station in order to clarify the concept of "goods," (2) be able to identify the work done for people at the service station in order to clarify the concept of "service," (3) become familiar with the different ways goods and services may be paid for at the service station, (4) become familiar with the tools and equipment used by service station workers, and (5) assemble a model service station and participate in role play activity.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Service Station	1 per teacher	4.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
196 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *The Service Station* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 024

PEOPLE WHO WORK WITH ANIMALS

A guide to provide primary grade students with awareness of careers available for people who work with animals

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

This teacher's guide provides the student in the primary grades with knowledge of animals and stimulates an awareness of the numerous careers available to people who want to work in that field.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are: Social studies, language arts, and arithmetic.

The topics covered in this guide are: Studying animals and their environment, learning about those who work with animals, applying knowledge in the classroom about animals, and examining responsibilities of people who work with animals.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 3.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Review knowledge already acquired about animals and people who work with them and learn about other and less familiar animals through exposure to a greater variety of animals; (2) increase knowledge of people who work with animals and the ways in which these people perform their tasks; (3) become familiar with the habits and needs of animal pets and learn how to care for them properly; and (4) gain greater understanding of the responsibilities, aptitudes, and training needed, and the duties involved in working with animals through firsthand observation.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
People Who Work With Animals	1 per teacher	4.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *People Who Work With Animals* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 025

PHYSICAL EDUCATION FOR TOMORROW

Materials for preschool and primary grade students to realize self-awareness by performing basic motor skills

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K - 12. The theme of the guidebook is career awareness and exploration.

It consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in a guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary activities.

For preschool and primary students, this guide builds on the concept of movement exploration. Self-awareness is realized as individual students discover potentials for performing basic motor skills and explore creative movement. Involvement in the production of a circus provides practical application of concepts and skills and awareness of career opportunities.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are physical education and art.

The topics covered in *Physical Education for Tomorrow* are: The body, directional movement, axial movement, crawling and rolling, walking and running, sliding and leaping, hopping and jumping, galloping and skipping, balls and beanbags, movement combination, creative movement, balance, rhythm, discovery course, and circus.

INTENDED USERS AND BENEFICIARIES

The materials in *Physical Education for Tomorrow* were developed for students in preschool and grades K-2.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff-development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and open classrooms.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in *Physical Education for Tomorrow* will: (1) Develop greater self-awareness through exploratory experiences in the movement of the body; (2) develop a realistic image of one's body in relation to space through lateral and directional movement; (3) further develop skill in movement in relation to space through axial movement; (4) further develop body control in relation to space through crawling and rolling; (5) explore a variety of locomotor skills, small muscle skills, eye-hand coordination, a sense of balance, and movements in rhythm; (6) further heighten self-awareness by exploring individual possibilities for creative movement; (7) explore play equipment and accessories used in a discovery course as a means of further developing axial and locomotor skills; and (8) apply in a practical way the concepts and skills developed in previous learning experiences to the production of a circus.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others, or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. Where concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In

most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally, the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Physical Education for Tomorrow	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977.

***Physical Education for Tomorrow* is available from:**
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 026

WORKING WITH TREES

A guide to acquaint students in grades 3 and 4 with the products and services trees provide

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

Learning experiences in this teacher's guide are designed to develop the awareness of students in the primary grades about the personal and social value of work and to introduce them to the variety of tree-related occupations. The guide places emphasis on both the affective and cognitive domains. Students are encouraged to relate the "work" of people to the functions of trees as a means of realizing both the values of trees to man and the satisfaction of working with them.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are: Science, art, music, language arts, and social studies.

The topics covered in this guide are: Getting acquainted with trees, products and services trees provide, jobs that tree products provide, jobs that help to care for trees, and the possibilities of the individual student working with trees.

INTENDED USERS AND BENEFICIARIES

The materials in this program were developed for students in grades 3 and 4.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this program will: (1) Identify products and services that trees provide as a means of developing knowledge of the relationship between something previously learned and something newly learned; (2) become familiar with occupations related to the care of trees and tree products as a means of developing an awareness of the occupational world through exposure to work settings, tasks, skills, tools, liabilities, and satisfactions; and (3) complete a job-oriented project dealing with trees or tree products as a means of becoming aware of emerging interests and the relationship of school experiences to future job experiences.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In

most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Working with Trees	1 per teacher	6.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Working with Trees* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 070 027

INDIVIDUALIZED APPROACH TO INSTRUCTION IN FOUNDATION EDUCATION

Foundation education for students entering occupational training

This is an individualized approach, emphasizing foundation preparation for students who will be entering occupational training, for General Educational Development (GED) preparation, and for support background where elected.

Curriculum area 11, *Mathematics Skills,* and curriculum area 15, *Communication Skills,* comprise the Foundation Education Program. The mathematics program is Individualized Learning Approach (ILA) in its entirety. Mountain Plains personnel have fitted ILA into the Mountain Plains Learning System through the use of certain organizational devices. The communication skills program has been rewritten and adapted from commercial sources by Mountain Plains personnel to suit the needs of Mountain Plains students.

Communication skills consists of three major divisions: Basic, advanced, and GED preparation. The Foundation Education Program is flexibly designed to allow individual prescriptions to be written, depending on the occupational requirements and aspirations of each student.

Criterion-referenced tests provide the basis for diagnosis and for individualized movement throughout learning segments prescribed for each student, who progresses at a rate commensurate with individual needs and capabilities.

SUBJECT AREA(S)

Subject areas are basic communication and mathematics skills.

INTENDED USERS AND BENEFICIARIES

Individualized Learning Approach (Mathematics) is used in commercially prepared form. *Communication Skills* is highly modified from a variety of sources and is designed specifically for Mountain Plains students who commonly have a somewhat lower-than-national norm reading level. In addition, Mountain Plains students have a vested interest in spending the least possible time in ancillary educational studies. They concentrate on preparing for the job of their choice. Consequently, foundation education courses, especially communication skills, are condensed, selected for relevanace to known student needs, and flexibly administered in order to meet individual needs. Because of these features, these Learning Activity Packages (LAP's) can be used with a variety of students having similar traits. Some examples are: Rural secondary schools, urban secondary schools, adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

The purpose of foundation education courses is to help overcome background deficiencies which would hinder student job-choice eligibility.

PATTERNS OF USE

Foundation education assignments are made individually and are determined by a number of factors: Job choice, level of current competence, and aspirational level. In addition, adjustments can be made to individual prescriptions on student, instructor, or other staff demand. The ILA system determines the pattern of use in mathematic skills; *Communication Skills* use the Mountain Plains Learning System approach, which is similar. Learning experience guides, levels, courses, units, and LAP's are used.

ASSESSMENT PROVISIONS

Students are initially placed in the program on the basis of Comprehensive Test of Basic Skills (CTBS) test scores. When the student's eventual programmatic changes have been determined, placement is based on program type, ability, and aspiration. Progress and mobility in the program are determined by cognitive criterion-referenced tests.

TIME REQUIREMENTS

Students are scheduled into either or both mathematics skills and communication skills. Student schedules vary up to 8 or 9 months, depending on need and, sometimes, desire.

IMPLEMENTATION PROCEDURES

Teacher orientation to the philosophy of individualized instruction is necessary for success in using this system. A guide to orientation is contained in the document, *Design for Field Testing of Mountain Plains Curriculum.*

MATERIALS AND EQUIPMENT

Materials are currently incomplete and unavailable. Costs have not been established. At present, the following materials are being developed and/or refined:

Learning Activity Packages (LAP's)
Learning Experience Guides (LEG's)
Course job title pretests and posttests
Teacher's manual
Student progress records
Student work plans
Administrator's Guide to Using the Mountain Plains System
Performance Activity List.

ASSURANCES AND CLAIMS

Average student time to complete necessary background learning for occupational preparation instruction is 100 hours. (General Educational Development) preparation students complete this segment in an average of 200 hours and pass GED tests at another institution under conditions controlled by that institution at a 97 percent success rate. Of the former 244 students taking this examination, 238 passed successfully.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
Glasgow AFB, Mont. 59231

Bruce C. Perryman, Project Director

AVAILABILITY

Products are to be completed and are under developmental copyright. At present, they are not available to the general public.

INFORMATION CURRENT AS OF MARCH 1975 ■

THE CAREER DEVELOPMENT SERIES (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

Information and practical suggestions on several major areas of career development

During the past 2 years, the Career Education Project has produced a series of career-related booklets for use with and by adult clients. Every person scheduled for counseling has been sent the introductory booklet prior to the first counseling session. The other booklets have been used by the counselors during the counseling process and, when appropriate, sent to the clients for additional information or reinforcement. This product, a single-volume adaptation of that series, contains information and practical suggestions on several major areas of career development, with each section also including a short listing of other materials to consult for further information.

The first section of this booklet presents an overview of the career development process and provides suggestions as to how people can locate sources of help for developing their own careers. The next section, on self-assessment, describes the importance of learning about oneself and suggests techniques to use in defining one's interests, abilities, values, and goals. This leads into sections on exploring the world of work and finding the appropriate training. The fifth section is devoted to identifying and dealing with such problems as meeting educational expenses, locating child and adult care, overcoming doubts and pressures, and coping with illegal practices, especially discrimination and educational "rip-offs." The final segment concerns the job search, particularly job-hunting techniques, presenting qualifications in writing, and the interview. It includes sample résumés, cover letters, application forms, and interview questions.

This booklet is being produced with the understanding that career development is a process unique to each individual, with no two people facing the same issues at the same time or in the same way. Therefore, the booklet is designed so that a person can use any part of it that best meets personal needs.

SUBJECT AREA(S)

Career education, continuing education, vocational and educational guidance, and counseling are the subject areas.

INTENDED USERS AND BENEFICIARIES

This product is intended for use by adults interested in their own career development and by those groups, organizations, and individuals involved in helping such career-concerned adults. It may also be used by high school and college students, guidance counselors, and placement officers.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To introduce and explain the basic steps in career development: self-assessment, exploring the world of work, finding appropriate training, dealing with obstacles, and conducting a job search; (2) to provide a career planning guide for use with and by adults; and (3) to serve as a prototype booklet through which the project can gain insight and feedback from other practitioners.

PATTERNS OF USE

The Career Development Series consists of six interrelated yet independent units which, for reasons of economy, are presented in a single package. The units may, however, be used separately in any order to meet individual needs. Further, the product has been written to be used both by counselors to help their clients in career development and by individual adults to meet their own particular career planning needs. The Series may also be used as part of an ongoing course about career development or as a model for the creation of localized materials.

ASSESSMENT PROVISIONS

The materials and information presented in *The Career Development Series* reflect what has been learned from the formative evaluation of 2-1/2 years of providing information, guidance, and referrals to career-concerned adults. Further, the document is a revision and refinement of two previous editions of a series, at least one volume of which has been sent to every project client since December 1973. Both counselors and clients are currently being asked to evaluate the utility of the materials. After copies of this version have been distributed, followup interviews will be conducted by phone, by mail, and in person. Selected reviewers will assess its potential utility.

TIME REQUIREMENTS

Since this product may be used by such a variety of audiences to meet individual needs, the time requirements for implementing the described activities will vary.

IMPLEMENTATION PROCEDURES

Although this product is independent and self-instructional, some readers might find it helpful to have some assistance from career counselors in implementing the described activities. Some might also find it helpful to use *The Career Development Series* in conjunction with other Career Education Project publications, especially *Women and the World of Work, External Degree Study: A New Route to Careers*, and *From Liberal Arts and Sciences to Careers: A Guide*.

ASSURANCES AND CLAIMS

This booklet contains products and descriptions of techniques determined to be effective on the basis of more than 2-1/2 years of formative evaluation. This booklet itself, however, has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the booklet will have these characteristics.

The booklet has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

DEVELOPER/AUTHOR:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

Peter Armitage, Information Unit Associate, Coauthor
Barbara Lazarus Wilson, Information Unit Director, Coauthor
John Nero, Information Unit Associate Director, Contributor

AVAILABILITY

The Career Development Series **is being produced under a developmental copyright granted in 1974, and will be available in spring 1975 from:**

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 002

DEVELOPING CAREER-RELATED MATERIALS FOR USE WITH AND BY ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A discussion of ways to gather, organize, and present data on occupational projections

In order to obtain feedback and to help others interested in creating a similar program, the Career Education Project is producing experimental editions of a series of five manuals, each describing ways to plan, establish, and operate one of the project's major components. The series as a whole is designed to show how to plan, establish, and operate a comprehensive career counseling service for adults. However, individual manuals may be used independently by a wide variety of audiences.

This manual describes the activities and products of the project's information unit, the component charged with the development and presentation of an information base about local educational, training, and supportive resources as well as career-related materials for use with clients.

After discussing the rationale for the information unit, the manual briefly deals with the processes and guidelines used to create the materials. It then provides an overview of the contents and uses of the unit's three major directories (*Educational and Training Resources*, *Supportive Services*, and *Occupational Projections* in addition to four instructional pieces: *The Career Development Series*, *Women and the World of Work*, *Liberal Arts and Sciences and the World of Work*, and *External Degree Study: A New Route to Careers*. It explains how these can be used together to form a career education curriculum and makes suggestions for adaptation of the materials for use in other settings.

Because the directories required such specialized formats and research techniques, the rest of the manual is devoted to describing the steps in their development. First, the manual discusses ways to gather, organize, and present data on occupational projections, and mentions the limitations of such data. The next section focuses on developing a directory of educational and training resources which relates education and training to careers. This section provides detailed guidelines for gathering, organizing, classifying, displaying, and updating the appropriate information. The same type of information is then provided for the directory of supportive services as well as for a card index system to the other two directories. Sample format pages and data collection instruments are included for all three directories.

SUBJECT AREA(S)

The subject areas include career education, career counseling, and curriculum development.

INTENDED USERS AND BENEFICIARIES

As its title suggests, this manual is intended for use by groups, organizations, or individuals interested or involved in developing career-related materials for use with or by adults. Its primary audiences are policymakers and practitioners involved in career counseling, manpower affairs, guidance, adult or continuing education, libraries, and placement. Although the project has collected and displayed data relevant to the needs of adults, the formats and procedures displayed in this manual are also appropriate for use by those working with inschool populations.

GOAL(S) OR PURPOSE(S)

The major goals of this project are: (1) To describe the principles, formats, and procedures used to create the career education project's curriculum materials for use with and by its adult clients; (2) to discuss procedures for adapting or replicating the project's career-related products; and (3) to serve as a prototype manual to provide the project with insight and feedback from other practitioners.

PATTERNS OF USE

This manual may be used with the four others in this series. It should help practitioners plan a program similar to the career education project. It may also be used independently by groups or individuals involved in creating career-related materials for adults. Further, it may serve as a guide to agencies interested in replicating specific localized directories or creating other informational materials.

ASSESSMENT PROVISIONS

The materials and information presented in this manual reflect what has been learned from the formative evaluation of over 2-1/2 years of providing career counseling to adults in an ongoing program. Further evaluation of the described activities will continue through the third year of project operation. After limited copies of the manual have been distributed, followup interviews will be conducted by telephone, by mail, and in person. Selected reviewers will assess its potential utility as a manual.

TIME REQUIREMENTS

Since this manual may be used by a variety of audiences in different settings, time requirements for implementing the described activities may vary.

IMPLEMENTATION PROCEDURES

Although this manual is independent and self-instructional, implementation of all of its described activities may require some reference to the other manuals in this series.

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques used by staff and clients during 2-1/2 years of formative evaluation. The manual has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness, although every attempt has been made to ensure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

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Melodie Shaw, Information Unit Assistant, Contributor
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AVAILABILITY

Developing Career-Related Materials for Use With and By Adults **is being produced under a developmental copyright granted in 1974. Cost has not been determined. It will be available spring 1975 from:**

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

ATTRACTING CLIENTS TO SERVICE-ORIENTED PROGRAMS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A product which discusses the principles and issues involved in advertising and promoting inservice oriented community-based career education programs

In order to obtain feedback and to help others interested in creating a similar program, the Career Education Project is producing experimental editions of a series of five manuals, each describing ways to plan, establish, and operate one of the project's major components. The series as a whole is designed to show how to plan, establish, and operate a comprehensive career counseling service for adults. However, individual manuals may be used independently by a wide variety of audiences.

As its title suggests, this manual can be used by any service-oriented program needing to attract clients. In addition to discussing the principles and issues involved in both public-service and commercial advertising, it explains the methods and procedures used by the project; provides samples of the advertisements, commercials, brochures, and other materials produced here; discusses the staff, skills, and materials required to attract clients; and suggests ways in which others can profit from the project's activities.

The first part of this manual stresses the importance of adequate preparation before recruitment or advertising efforts begin. This section deals with the need to define the service, audience, and advertising outlets; determines the budget; and prepares to evaluate effectiveness. The manual discusses specific ways to use information from these initial activities to create a unified campaign. It also deals with the use of advertising agencies and other outside sources of help.

The major part of the manual concerns the creation of products for the mass media, i.e., television, radio, and the press. In addition to presenting the advantages and limitations of each of these types of advertising, the manual provides guidelines for creating each type of mass media product and describes those techniques used by this project. There is a discussion of ways to distribute television and radio spots, place newspaper ads and articles, and arrange for guest appearances on radio and television shows.

Reinforcing the message is the theme of the next section, which first discusses using a variety of collateral products and techniques, such as brochures, posters, exhibits, and a telephone canvass. It then deals with the need for creating general community acceptance of a program and presents suggestions about implementing a community information program.

The final segment focuses on staffing an advertising component. Here, as in all the other sections, emphasis is placed on economic considerations, in view of the minimal budgets available to most service-oriented programs.

SUBJECT AREA(S)

The subject areas include career education, journalism, advertising, and public relations.

INTENDED USERS AND BENEFICIARIES

This program is intended for use by groups, organizations, and individuals involved in recruiting clients to an adult career counseling service or any other service-oriented program. Its primary audiences are practitioners, policymakers, advertisers, and communications teachers.

GOAL(S) OR PURPOSE(S)

The major goals of this program are: (1) To describe methods and techniques to attract clients to an adult career counseling service, (2) to describe ways to attract clients to any service-oriented program economically, (3) to share the career education project's outreach experiences with potential adapters of the service, and (4) to serve as a prototype manual about which the project can gain insight and feedback from other practitioners.

PATTERNS OF USE

This manual may be used along with the four others in this series to help practitioners establish a program similar to the career education project. It may also be used independently by groups or individuals involved in attracting clients to any service-oriented program. Finally, it may be used as part of an ongoing course concerned with advertising, public relations, or journalism.

ASSESSMENT PROVISIONS

The materials and information presented in this manual reflect what has been learned from the formative evaluation of more than 2-1/2 years of attracting clients to an ongoing service program. More than 5,000 clients have been attracted, at a steadily decreasing cost per client, through the use of the described materials and techniques. After limited copies of the manual have been distributed, followup interviews will be conducted by phone, by mail, and in person with selected reviewers to assess its potential utility as a manual.

TIME REQUIREMENTS

Since this manual may be used in many settings by a variety of audiences, the time requirements for implementing the described activities will vary.

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AVAILABILITY

Attracting Clients to Service-Oriented Programs is being produced under a developmental copyright granted in 1974. It will be available spring 1975 from:
Education Development Center, Inc.
55 Chapel St.
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IMPLEMENTATION PROCEDURES

Although this manual is self-instructional to some extent, implementing the described activities may require some technical assistance from professional writers, producers, and others in the mass media.

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques determined to be effective on the basis of more than 2-1/2 years of formative evaluation. The manual itself, however, has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 004

DESIGNING AND OPERATING A CAREER COUNSELING SERVICE FOR ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A manual to show how to plan, establish, and operate a comprehensive counseling service

In order to obtain feedback and to help others interested in creating a similar program, the Career Education Project is producing experimental editions of a series of five manuals, each describing ways to plan, establish, and operate one of the project's major components. The series as a whole is designed to show how to plan, establish, and operate a comprehensive career counseling service for adults.

Focusing on the project's counseling component, this manual deals with the design and operation of a telephone career counseling service using paraprofessional counselors who are supervised by professionals. After a brief description of some of the factors involved in planning such a service, the manual discusses the service's design, including an overall model of service-client interaction, methods for use in intake and initial counseling interviews, a supervisor-counselor-client process for identifying client needs and counseling issues, specific counseling procedures used in responding to client needs, and methods for termination and followup of clients.

The manual discusses the recruitment and selection of paraprofessional counselors, identifying a variety of criteria for selection and providing guidelines for use in interviewing applicants and making selection decisions. A section on the project's approach to training and supervision briefly presents the training model employed and illustrative training objectives.

In dealing with the nature and use of career-related resource materials in counseling, the next section provides summary descriptions of a number of specific materials and directories developed by project staff and used by counselors and clients.

The final section concerns recordkeeping and data-collection procedures and covers such related matters as methods of scheduling counseling interviews, storing client records, and collecting information at various stages of the counseling process.

SUBJECT AREA(S)

The subject areas include career education, career counseling, guidance, and psychology.

INTENDED USERS AND BENEFICIARIES

As its name implies, this manual is intended for use by any group, organization, or individual interested or involved in designing or operating a service to provide career counseling to adults. Its primary audiences are counselors, policymakers, administrators, and educators. It may also be used by persons interested in hiring and training paraprofessional counselors or in using the telephone as a service delivery mechanism.

GOAL(S) OR PURPOSE(S)

The major goals of this program are: (1) To describe the principles and issues involved in designing and operating a career counseling service for adults; (2) to explain the methods and procedures used and evaluated by the career education project's counseling component; (3) to describe the staff, skills, and materials necessary to have paraprofessionals provide career counseling by telephone; and (4) to serve as a prototype manual about which the project can gain insight and feedback from other practitioners.

PATTERNS OF USE

This manual may be used along with the four others in this series to help practitioners establish a program similar to the career education project. It may also be used independently by groups or individuals interested or involved in working with paraprofessional counselors or using the telephone as a mechanism for service delivery. Finally, it may be used as part of an ongoing course or training program for paraprofessional career counselors.

ASSESSMENT PROVISIONS

The materials and information presented in this manual reflect what has been learned from the formative evaluation of more than 2-1/2 years of providing career counseling to adults in an ongoing program. Further evaluation of the described activities will continue through the third year of project operation. After limited copies of the manual have been distributed, followup interviews will be conducted by phone, by mail, and in person with selected reviewers to assess its potential utility as a manual.

TIME REQUIREMENTS

Since this manual may be used by a variety of audiences in a variety of settings, the time requirements for implementing the described activities will also vary.

IMPLEMENTATION PROCEDURES

Although this manual is independent and self-instructional to some extent, implementing all of its described activities will require technical assistance from professional counselors, information from the other manuals in this series, or both.

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques determined to be effective on the basis of more than 2-1/2 years of formative evaluation. The manual itself, however, has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

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AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 005

ESTABLISHING AND OPERATING A CAREER RESOURCE CENTER FOR ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

Specific guidelines for establishing a resource center of career-related materials for adults

In order to obtain feedback and to help others interested in creating a similar program, the Career Education Project is producing experimental editions of a series of five manuals, each describing ways to plan, establish, and operate one of the project's major components. The series as a whole is designed to show how to plan, establish, and operate a comprehensive career counseling service for adults. However, individual manuals may be used independently by a wide variety of audiences.

This manual offers specific guidelines to those interested in establishing or expanding a resource center of career-related materials for adults as an adjunct to a career counseling service. On a broader scale, it offers suggestions about creating and operating any type of resource center or reference library by addressing several areas of general concern.

The first section of the manual stresses the importance of determining who will be using the collection and what types of materials they will need. It then discusses the available sources from which to acquire the necessary materials: Computerized information sources, Federal agencies and publications, State and local agencies, periodicals, pamphlets, catalogs, and books.

The manual also indicates how the operating practices should be designed to accommodate the ways in which the clients, staff, and general public will be using the collection. This leads to a discussion of staff requirements and procedures for ordering; recordkeeping; determining space, furnishings, and equipment needs; cataloging and classifying materials; and disseminating and circulating parts of the collection. In each instance, the manual addresses these considerations in terms of the methods and procedures used by the career education project's resource center. It also offers suggestions for possibly adapting the procedures to other situations.

Detailed appendixes to the manual's text provide ordering of sources for free and inexpensive occupational information, a list of books most frequently used by visitors to the project's resource center, and a partially annotated list of the 120 periodicals to which the resource center subscribes.

SUBJECT AREA(S)

The subject areas are career education, vocational guidance, and library service.

INTENDED USERS AND BENEFICIARIES

This manual is intended for use by groups, organizations, and individuals interested or involved in creating and operating a reference library of career-related materials. Its primary audiences are librarians, guidance counselors, adult educators, and placement officers. Although the project's collection has focused on materials for adults, many of the described ordering sources and organizational methods are also appropriate for use by those working with inschool populations.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To describe the principles and practices involved in planning, establishing, and operating a resource center of career-related materials for adults; (2) to share the career education project's experiences with others interested in developing or expanding a reference library of career-related materials; and (3) to serve as a prototype manual about which the career education project can gain insight and feedback from other practitioners.

PATTERNS OF USE

This manual may be used along with the four others in this series to help practitioners plan a program similar to the career education project. It may also be used independently by groups or individuals involved in establishing a reference library of career-related print materials. Individual sections of the manual may be used as self-contained units by readers interested in learning about such topics as using computerized information services, organizing occupational information, or maximizing staff and public use of a collection.

ASSESSMENT PROVISIONS

The materials and information presented in this manual reflect what has been learned from the formative evaluation of more than 2-1/2 years of providing career counseling to adults in an ongoing program. Further evaluation of the described activities will continue through the 3d year of project operation. After limited copies of the manual have been distributed, followup interviews will be conducted by telephone, by mail, and in person with selected reviewers to assess its potential utility.

TIME REQUIREMENTS

Since this manual may be used by a variety of audiences in different settings, the time requirements for implementing the described activities will vary.

IMPLEMENTATION PROCEDURES

Although this manual is independent and self-instructional to some extent, implementing all of its described activities might require technical assistance from professional librarians or information from the other manuals in the series.

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques used by staff and clients for more than 2-1/2 years of formative evaluation. Since the manual has not yet been distributed, the developers cannot guarantee its transportability or harmlessness although every attempt has been made to ensure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

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AVAILABILITY

***Establishing and Operating a Career Resource Center for Adults* is being produced under a developmental copyright granted in 1974. Cost has not been determined. It will be available spring 1975 from:**

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RD 080 006

EXTERNAL DEGREE STUDY: A NEW ROUTE TO CAREERS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

An alternative form of postsecondary education

This booklet has been designed for people who are considering a college education for career preparation but who find it difficult to participate in a traditional campus-bound college program. The booklet discusses external degree study, an alternate form of postsecondary education whereby one can earn college credits for study done at home, on the job, in fieldwork situations, and in part-time courses, as well as by traditional on-campus coursework. Emphasis is on describing external degree study and how it can be used for exploring careers, beginning and progressing in a career, and changing career direction.

The booklet discusses 13 important points to consider in choosing an external degree program including objectives and philosophy, assessment of prior learning, residency, curriculum and learning options, and methods of evaluation. It provides descriptions of nine established external degree programs in New York and New England, and the names and addresses of other similar programs across the country.

The next booklet section provides guidelines for planning a learning experience through assessing prior learning, designing a study plan, and incorporating career goals. Several case studies of external degree students are included to illustrate various ways such study can be arranged. The text concludes with a section on how to use an external degree to acquire additional skills or to get a job.

Because external degree study is such a relatively new concept, the booklet includes a glossary of commonly used terms in the field. There is an appendix of eight resource sections covering topics such as: further information on external degree study, self-assessment and goal setting for the college student, and locating learning opportunities.

SUBJECT AREA(S)

Career education, nontraditional study, external degree study, continuing education, vocational and educational guidance, and counseling are the subject areas.

INTENDED USERS AND BENEFICIARIES

This booklet is intended for use by adults who are interested in postsecondary education but who are unable or unwilling to attend a traditional college; current external degree students; and those groups, organizations, and individuals involved in counseling prospective or current students. In the third category, it is especially appropriate for external degree program advisers and counselors.

GOAL(S) OR PURPOSE(S)

Booklet goals are: (1) To familiarize adults with external degree study as a nontraditional form of education; (2) to help adults determine whether external degree study will meet their career needs; (3) to help readers select an external degree program appropriate for their needs; (4) to illustrate ways in which external degree study programs can be designed to meet career objectives; (5) to provide a listing of major external degree programs in the United States; and (6) to serve as a prototype which can provide the project with insight and feedback from other practitioners.

PATTERNS OF USE

External Degree Study: A New Route to Careers may be used by academic, vocational, or career counselors as a source of information or as a supplement to individual counseling sessions. It may also be used independently by adults interested in nontraditional study as a guide to their own career planning.

ASSESSMENT PROVISIONS

This booklet reflects that which has been learned through investigation and analysis of external degree programs. Portions of the booklet include information and ideas that have been used with the career education project's clients; other portions summarize data prepared for the National Institute of Education. To date, the booklet as a whole has been reviewed only by staff. After copies have been distributed, followup interviews will be conducted by phone, by mail, and in person. Selected reviewers will assess its potential utility as a booklet.

TIME REQUIREMENTS

Since this product may be used by a variety of audiences to meet individual needs, the time requirements for implementing the described activities will vary.

IMPLEMENTATION PROCEDURES

Although this product is independent and self-instructional, some readers might find it helpful to have some assistance from academic or career counselors in implementing the described activities. Some might also find it helpful to use *External Degree Study: A New Route to Careers* in conjunction with other career education projects publications, especially *The Career Development Series* and *From Liberal Arts and Sciences to Careers: A Guide.*

ASSURANCES AND CLAIMS

This product contains information and descriptions of techniques reflecting several years of research and other activity. The booklet itself has not yet been printed or distributed, so the developers cannot guarantee its transportability or harmlessness although every attempt has been made to insure that the booklet will have these characteristics.

This booklet has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

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55 Chapel St.
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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 007

FROM LIBERAL ARTS AND SCIENCES TO CAREERS: A GUIDE (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A booklet to help students to identify and develop professional competencies resulting from liberal arts studies and experiences

Designed to assist people who have been considering, engaged in, or graduated from programs in the Liberal Arts and Sciences (LAS), this booklet is based on the concept of identifying and developing competencies—what people know and can do as the result of their study and experiences. This approach suggests that students can develop skills which are applicable to a wide spectrum of careers while studying an arts or sciences discipline.

The booklet briefly discusses how the general state of the labor market and a lack of career planning skills have resulted in unemployment, underemployment, and relatively low earnings for LAS graduates generally, and additional problems facing women and minorities. Ways of coming to grips with this situation are discussed next.

The first section of the booklet deals with career focus. It includes suggestions on self-assessment and learning about occupations. This is followed by a section on developing a plan of action, with particular hints for LAS students and graduates. The booklet also describes ways of acquiring skills and knowledge after graduation—through graduate schooling, professional training, nondegree study, and other methods. The remaining part of the booklet is concerned with the job search. After dealing with a number of ways to locate a job opening, the booklet discusses ways to answer a lead and to present one's qualifications through the résumé, the application form, and the interview.

To illustrate various concepts, the booklet includes sample letters and résumés, charts of possible career options for liberal arts majors, and a chart suggesting ways LAS students can plan their course of study to acquire specific competencies.

SUBJECT AREA(S)

The subject areas include career education, continuing education, liberal arts and sciences, vocational and educational guidance, counseling, and competency-based learning.

INTENDED USERS AND BENEFICIARIES

This product is intended for use by liberal arts and sciences students and graduates as well as groups, organizations, and individuals involved in teaching, counseling, or placement. It is appropriate for college advisers, college placement officers, and high school guidance counselors.

GOAL(S) OR PURPOSE(S)

The major goals of this booklet are: (1) To provide an overview of the problems liberal arts and sciences graduates face in the labor market, (2) to illustrate ways in which a liberal arts and sciences program can be adequate preparation for many careers, (3) to introduce career planning approaches to an LAS education, (4) to provide possible career options for LAS graduates, and (5) to serve as a prototype to provide the career education project with insight and feedback from other practitioners.

PATTERNS OF USE

The booklet may be used by individuals considering, engaged in, or graduated from liberal arts and sciences programs. It may also be used by career counselors, guidance counselors, or placement officers at the high school or college level—either as reference material or as an adjunct to academic or career counseling sessions. It may further be used as part of a high school, junior college, or college orientation session.

ASSESSMENT PROVISIONS

The materials and information presented in this product reflect that which has been learned from the formative evaluation of 2-1/2 years of providing information, guidance, and referrals to career-concerned adults. The document is also an expanded and revised version of a series of project-produced booklets which have been used for the past year. Both counselors and clients are currently being asked to evaluate the material's utility. After copies of this version have been distributed, followup interviews will be conducted by telephone, by mail, and in person. Selected reviewers will assess potential utility.

TIME REQUIREMENTS

Since this product may be used by a variety of audiences to meet individual needs, the time requirements for implementing the described activities will vary.

IMPLEMENTATION PROCEDURES

Although this booklet is independent and self-instructional, some readers might find it helpful to have some assistance from a career or an academic counselor in implementing the described activities. Some might find it helpful to use this booklet in conjunction with other career education project publications, especially *Women and the World of Work* and *External Degree Study: A New Route to Careers.*

ASSURANCES AND CLAIMS

This booklet contains products and descriptions of techniques determined to be effective on the basis of more than 2-1/2 years of formative evaluation. Since the manual has not yet been distributed, the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the booklet will have these characteristics.

The booklet has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

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AVAILABILITY

From Liberal Arts and Sciences to Careers: A Guide **is being produced under a developmental copyright granted in 1974. It will be available summer 1975 from:**

Education Development Center, Inc.
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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 008

INTEGRATING RESEARCH AND EVALUATION INTO THE OPERATION OF SERVICE-ORIENTED PROGRAMS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A manual to help plan, establish, and operate a comprehensive counseling service

In order to obtain feedback and to help others interested in creating a similar program, the Career Education Project is producing experimental editions of a series of five manuals, each describing ways to plan, establish, and operate one of the project's major components. The series as a whole is designed to show how to plan, establish, and operate a comprehensive career-counseling service for adults. However, individual manuals may be used by a wide variety of audiences.

Experience has shown that when research and evaluation are incorporated into a service-oriented program, a number of difficulties generally arise that can adversely affect the delivery of the service, limit the usefulness of the evaluation, or both. Decisionmakers, whether they be funders, administrators, staff, or evaluators, therefore need to be made more aware of the issues and problems that arise when evaluation is interfaced with a service program. This manual attempts to increase that awareness by presenting a model in which research and evaluation have been integrated into the operation of an ongoing service program.

The manual discusses each research and evaluation activity of the Career Education Project in relation to the program's evolution, and associates the issues and problems of evaluation with the project's response to each through its processes and products. The process discussion includes the various types of research activities (needs assessment; goal definition; research design; data collection, processing, and analysis; and information dissemination) and the interactions among coworkers. The products described include data collection instruments, coding formats, and other documents. Numerous samples of these products are also included.

The manual further discusses the skills and abilities necessary for a research and evaluation staff to perform effectively within a service-oriented program, and presents some suggestions for alternative approaches for other programs.

SUBJECT AREA(S)

Career education, educational research, evaluation, and behavioral research are the subject areas.

INTENDED USERS AND BENEFICIARIES

This manual is intended for use by groups, organizations, or individuals interested or involved in integrating research and evaluation into the operation of service-oriented programs. Its primary audiences are policymakers and practitioners involved in career counseling, educational research and evaluation, and service-oriented programs. Although the processes and products described are related specifically to the needs of the Career Education Project, the formats and procedures may also be easily adapted for use by those working in other types of programs.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To describe the principles and issues involved in integrating research and evaluation into the operation of service-oriented programs; (2) to discuss the procedures and formats employed by the research and evaluation component of the Career Education Project; (3) to provide guidelines and materials for use or adaptation by evaluators or human service administrators; and (4) to serve as a prototype manual about which the project can gain insight and feedback from other practitioners.

PATTERNS OF USE

This manual may be used with the four others in this series to help practitioners establish a program similar to the Career Education Project. It may also be used independently by groups or individuals involved in designing or managing research and evaluation activities for service-oriented programs. Further, the data formats presented may be used or adapted for use in other settings.

ASSESSMENT PROVISIONS

The materials and information presented in this manual reflect what has been learned from the formative evaluation of more than 2-1/2 years of providing career counseling to adults in an ongoing program. Further evaluation of the described activities will continue through the 3d year of the project operation. After limited copies of the manual have been distributed, followup interviews will be conducted by phone, by mail, and in person with selected reviewers to assess its potential utility as a manual.

TIME REQUIREMENTS

Since this manual may be used by a variety of audiences in different settings, the time requirements for implementing the described activities will vary.

IMPLEMENTATION PROCEDURES

Although this manual is independent and self-instructional to some extent, implementing all of its described activities will require technical assistance from professional evaluators, information from the other manuals in this series, or both.

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques used by staff during more than 2-1/2 years of formative evaluation. The manual itself, however, has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

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John F. Murphy, Research Coordinator, Coauthor

AVAILABILITY

Integrating Research and Evaluation into the Operation of Service-Oriented Programs is being produced under a developmental copyright granted in 1974, and will be available in spring 1975 from:
Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 009

BIBLIOGRAPHIES OF CAREER-RELATED MATERIALS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A shelf collection list and a series of annotated bibliographies of career-related materials

For more than 2 years, the Career Education Project has maintained a resource center of career-related materials for use by the project's clients, counselors, and other staff members, as well as the general public. This product presents both a shelf collection list and a series of annotated bibliographies of the resource center's cataloged collection.

The first section of this booklet presents a complete bibliographic citation for each cataloged publication in the collection. Each citation includes such information as author, title, place and date of publication, publisher, ordering source (if different from publisher), number of pages or volumes, and price and type (hardcover or paperback). The approximately 1,400 entries are arranged by library classification numbers, based on the Educational Resources Information Center (ERIC) system. They are accompanied by a subject index which covers over 60 major terms including adult counseling, career planning, employment projections, testing, financial aid, counselor training, evaluation, occupational information, paraprofessional personnel, working women, minority groups, and educational research. The publications in the list have been acquired from commercial publishers, the ERIC system, private agencies and organizations, conferences and seminars, professional associations, and State, local, and Federal governments. The list also indicates which items are annotated in the second section of the booklet.

Section II presents annotated bibliographies of materials in seven major topic areas of the cataloged collection. Four of these categories include materials of use to counselors and clients: Financial aid directories, educational and training resources directories, occupational information, and the job search. The other three—counseling, career education, and women—contain materials primarily useful to counseling, education, and other professions.

SUBJECT AREA(S)

The subject areas include career education, counseling, vocational and educational guidance, postsecondary education, paraprofessional training, research and evaluation, and women's studies.

INTENDED USERS AND BENEFICIARIES

This product is intended for use by librarians, guidance counselors, adult educators, placement officers, and career education program planners.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To offer a basis for selecting career-related materials, (2) to provide a comprehensive listing of the cataloged materials available in the career education project's resource center, and (3) to serve as a prototype to provide the project with insight and feedback from other practitioners.

PATTERNS OF USE

The shelf collection list and the annotated bibliographies may serve as the basis for selecting particular types of career-related materials. Although the product may be used independently, it may also be used with other project publications to establish a career education or counseling service for adults.

ASSESSMENT PROVISIONS

This booklet reflects what has been learned from 2 years of collecting career-related materials and informally evaluating their use with and by the project's clients, counselors, and other staff members as well as other resource center visitors. The booklet as a whole, however, has not developed to the extent that would permit formal evaluation. After it has been completed and copies have been distributed, followup interviews will be conducted by telephone, by mail, and in person. Selected reviewers will assess its potential utility.

IMPLEMENTATION PROCEDURES

Although this product is independent, many readers may find it helpful to have assistance from professional librarians in selecting and acquiring the described publications. Some readers may also find it helpful to use the product in conjunction with the project's series of manuals designed to show how to establish and operate a career counseling service for adults. The one manual in this series which should prove valuable in this context is *Establishing and Operating a Career Resource Center for Adults.*

RD 080 009

ASSURANCES AND CLAIMS

This booklet contains descriptions of materials collected and used by project staff and clients during the past 2-1/2 years. The booklet has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness although every attempt has been made to insure that the booklet will have these characteristics.

The booklet is being carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content in its text.

DEVELOPER/AUTHOR:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

Nancy Tobin, Resource Center Director, Coordinator
Jennifer Banks, Resource Center Librarian
Cynthia Szymanski, Resource Center Librarian

AVAILABILITY

Bibliographies of Career-Related Materials **is being produced under a developmental copyright granted in 1974. It will be available in summer 1975 from:**

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 010

REPORT OF FIFTY SELECTED CENTERS OFFERING CAREER COUNSELING SERVICES FOR WOMEN (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A telephone study of selected counseling centers to collect data for the purpose of improving a research and development model

Paraprofessional career counselors at the career education project have been providing information, guidance, and referrals to career-concerned adults for more than 2-1/2 years. During this time, the project has evolved into a unique research and development model consisting of five major components. The core component, counseling, is supported by three others—outreach, information unit, and research center—and the effectiveness of these four is gauged by research and evaluation.

As part of the effort to improve this model, the project has collected and reviewed literature in numerous related fields. In spring 1974, the staff conducted a telephone study of 50 selected career counseling centers for women across the country. This product is a report of that study.

The 50 agencies, programs, services, and centers studied were identified from 4 primary information sources: The U.S. Labor Department's Women's Bureau, the International Association of Counseling Services' Directory, the Catalyst network, and materials collected by the project's Resource Center. Each of the centers offered career counseling services to at least 50 women per year; none of them had placement as its sole or major purpose. In all, they had a variety of sponsors and fees and were located in 22 different States and the District of Columbia.

In addition to an overview of the findings, the report provides a 2-page summary description of each center. The factors covered are: The agencies' origins, organizational structure, budget, sources of support, clientele, staffing, office hours, publicity, objectives, career-related services (such as individual and group counseling, courses, seminars, testing, and library facilities), evaluation data, and plans. The report also includes a similar description of the career education project.

SUBJECT AREA(S)

Subject areas involve career education, career counseling, vocational and educational guidance, and women's studies.

INTENDED USERS AND BENEFICIARIES

This report is intended for use by anyone involved in planning, establishing, or operating a career counseling service for women. It is also appropriate for anyone interested in studying such services.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To furnish an overview of centers across the country providing career counseling services to women; (2) to describe 50 such centers, as well as the career education project, in detail; and (3) to serve as a mechanism for the exchange of information among such centers.

PATTERNS OF USE

This report may be used as a research document to provide information about centers across the country offering career counseling services to women. It may also provide insight to policymakers and practitioners interested or involved in designing, establishing, or operating such a center.

ASSESSMENT PROVISIONS

The directors of the 50 centers have reviewed and approved the description of their programs. Copies of the entire report have also been distributed to the National Institute of Education, the 50 centers, and other interested parties for use and review.

ASSURANCES AND CLAIMS

This report has been distributed to agencies and individuals in 23 States and the District of Columbia, thereby demonstrating its transportability. Its developers have received no reports of harm associated with its use.

The report is intentionally biased in that it reflects a survey of centers offering services to women. Aside from this factor, however, the text has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

RD 080 010

DEVELOPER/AUTHOR:

Education Development Center, Inc.
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Newton, Mass. 02160

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Lise Bank-Jensen, Resource Center Assistant, Coauthor
Jennifer Banks, Resource Center Librarian, Contributor
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Cynthia Szymanski, Resource Center Librarian, Contributor

AVAILABILITY

Report on 50 Selected Centers Offering Career Counseling Services for Women is available for $2 from:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

CHRIS BEGINS AGAIN

A film produced to illustrate the career-related needs of adults

For more than 2-1/2 years, the Career Education Project has been developing and testing ways of meeting the career-related needs of adults. The core of the service has been the use of paraprofessional career counselors to provide information, guidance, and referrals by telephone. Their efforts have been supported by those of a resource center which collects and circulates career-related materials, an information unit which packages this information in useful formats for clients and counselors, and an outreach component which informs the public of the service. A research and evaluation unit has continually informed the rest of the staff about the program's development and has described the client's characteristics, needs, and outcomes.

This 25-minute film, "Chris Begins Again," has been produced to illustrate the ways these components meet the clients' needs. In semidocumentary fashion, the film traces the daily activities of one client, 30-year-old Christine S. explains the reasons for contacting the project. She describes the changes career counseling has made in her life.

The film provides interviews with Christine's paraprofessional counselor, the project director, and the people in charge of the five major components. It also includes one of the project's televised public service spots and shots of components in action.

SUBJECT AREA(S)

The subject areas include career education, continuing education, counseling, and vocational and educational guidance.

INTENDED USERS AND BENEFICIARIES

Chris Begins Again is primarily intended for use by policymakers and practitioners in the fields of education and counseling who would be interested or involved in working with career-concerned adults or in establishing a program similar to that of model III.

GOAL(S) OR PURPOSE(S)

The major goals of this film are: (1) To identify the components of the home/community-based career education project, (2) to illustrate the ways these components relate to and reinforce each other to meet clients' needs, and (3) to depict the experiences of one client to illustrate the impact of career decisionmaking in life.

PATTERNS OF USE

This film may be used independently or as part of a presentation on career education or counseling.

TIME REQUIREMENTS

The film is 25 minutes long.

IMPLEMENTATION PROCEDURES

Showing the film requires only a 16mm sound projector and a projectionist. Because the film is illustrative, people interested in learning more about the depicted activities would find it useful to have copies of the project-produced manuals on establishing and operating the various components, and technical assistance from the project's developers.

ASSURANCES AND CLAIMS

Technically the film can be shown wherever there is a projectionist with a 16mm sound projector. It is readily transportable as a film. Its value as a descriptive product will be tested during spring and summer 1975 when it is sent to individuals and organizations for use alone and as part of a presentation made by project staff members.

The script, footage, and preliminary prints have been carefully screened to eliminate any form of harm, social bias, ethnic or sexual stereotyping, or inappropriateness of content.

DEVELOPER/AUTHOR:

Education Development Center
55 Chapel St.
Newton, Mass. 02160

Richard Peace, Writer
David Vogt, Director and Editor
Diane M. Disney, Associate Producer
David Nelson, Producer
Edward Joyce, Cameraperson
Paul Coughlin, Electrician/Soundperson

AVAILABILITY

***Chris Begins Again* is currently available for $115 from the developer/distributor:**
Education Development Center
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 012

TALKING WITH CLORAE AND ALBIE (WORKING TITLE, PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)

A film to make young people aware of some of the problems and solutions encountered in the search for career training

Clorae Prince and Elvernoy (Albie) Holland are friends in their early twenties. They met in Upward Bound, where they described themselves as having been very "tough" young girls. Both had been poor students at Cambridge High and Latin, the public high school in a city of 100,000 that is adjacent to Boston. Both were school dropouts, but their lives were different after dropping out.

Clorae falls in love with a glamorous jazz musician. They marry and Clorae soon finds herself burdened with all the household responsibility, plus entertaining her husband's friends. They become divorced. Clorae works hard to care for her three young children. Clorae is getting her high school diploma on a scholarship at Shaw Prep, a private alternative high school. She plans to be a nurse and knows how she will get her training.

After Albie drops out of school, the jobs she gets are boring and low paying. She finishes her high school work at Shaw Prep and takes the Scholastic Aptitude Test (SAT). She does very badly on the SAT. Despite this, Marlboro College in Vermont is trying to recruit black students at this time, and Albie receives a scholarship to attend. She is one of two blacks and finds the situation difficult. She stays at Marlboro for 2 years. She then returns to Cambridge and again has a series of low-level jobs. Finally, she enrolls in the University of Massachusetts—Boston's College Three, which emphasizes social and community services. She has her own apartment and supports herself with a research job for the Boston Women's Collective.

Another person in the film is Linda Walsh, a white married woman in her early thirties with two children. She needs to find self-fulfillment through a career. When her children are old enough to be left home, she begins to work as a secretary. After 1 year, she becomes dissatisfied with her limited role. She also enrolls in College Three and works at the Boston Women's Collective. Many issues are brought out in the film: That women cannot rely on the myth of "happily ever after"; that counseling and career training are available and useful; that it is never too late to begin working toward a career; and that great obstacles to self-determination can be overcome.

SUBJECT AREA(S)

Career education, sociology, social studies, cultural anthropology, guidance, and urban studies are the subject areas.

INTENDED USERS AND BENEFICIARIES

This film is intended for use with high school students, teachers, and adults, particularly women.

GOAL(S) OR PURPOSE(S)

The major goal of this film is to make young people aware of some of the problems and solutions in the search for career training.

PATTERNS OF USE

This film may be used as the basis for a minicourse or as part of an ongoing course in several subject areas. It may also be used for guidance or for awareness discussions.

ASSESSMENT PROVISIONS

Formative evaluation of the film will be conducted during program development. Upon completion, there will be independent field trials on a limited basis using feedback questionnaires.

TIME REQUIREMENTS

Using the film with the print materials can take from 3 days to 6 weeks. The film itself runs 30 minutes.

IMPLEMENTATION PROCEDURES

The film requires a 16mm sound projector and a teacher or group leader.

MATERIALS AND EQUIPMENT

Equipment needed to use this film is a 16mm sound projector.

ASSURANCES AND CLAIMS

The information gathered during the development period indicates that the film can be used alone, by a teacher, or group leader, and is readily transportable.

The script and footage have been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriate content.

DEVELOPER/AUTHOR:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

Adeline Naiman, Executive Producer
Joyce Chopra, Director

AVAILABILITY

Talking With Clorae and Albie will be available in fall 1975. Cost is yet to be determined. For information, contact:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 013

CAREER GUIDANCE UNITS

A program to help students gain greater understanding of themselves by facilitating development of exploratory and decisionmaking skills

The Career Decisionmaking Program forms a core around which a comprehensive Career Education Program can be developed for the secondary school level. It is designed to help students gain greater understanding of themselves and the world of work by facilitating the development of exploratory and decisionmaking skills. The program has two products: 15 *Career Guidance Units* and a supportive *Career Information System* based on the *Dictionary of Occupational Titles* (DOT), 3d edition, 1965.

The *Career Guidance Units* enhance student skills in exploration of self and the world of work, and in the decisionmaking process by which career-related information can be utilized. They emphasize the processes by which information is gathered, evaluated, and used, and the content of that information. Thus, the units help prepare students to respond to new information and changes in themselves and their environment.

The units center on student activities in a group-guidance setting. The content and format are appropriate to the developmental level of secondary school students. The units are designed to help students meet the demands or expectations school and society hold for them at this stage in their development. The materials and activities provide flexibility in mode and level to accommodate a wide range of students. Each unit addresses specific objectives which are related to the career decisionmaking program objectives.

The counselor/teacher directs class activities, shows filmstrips, and facilitates discussion, aided by a utilization guide which contains detailed lesson plans for each unit. The counselor/teacher is expected to set the climate so that students recognize that their personal values and the things they want to be, or do, are just as worthy as the goals of others. The utilization guide includes suggestions for additional activities. Local schools can build in their own optional exercises, such as aptitude testing, field trips, and directed work experiences.

SUBJECT AREA(S)

The *Career Guidance Units* facilitate the development of career exploration and decisionmaking skills. The titles of the units are: (1) Career Awareness, (2) Self-Exploration, (3) Occupational Information, (4) Decisionmaking, (5) Interests, (6) Work Activities, (7) Work Situations, (8) Aptitudes, (9) Work Conditions, (10) GED and School, (11) Work and Leisure Experiences, (12) Economic Influences, (13) Social and Family Influences, (14) Career Planning, and (15) Your Future.

INTENDED USERS AND BENEFICIARIES

Designed for use with secondary school students of all abilities, the unit materials have been used effectively in grades 10, 11, and 12 during school year 1973-74 field testing. Included in the field tests were students from various social, economic, geographic, and cultural backgrounds. During school year 1974-75, the units are being field tested in grades 8, 10, and 11.

GOAL(S) OR PURPOSE(S)

The units are designed to help students gain greater understanding of themselves and the world of work by facilitating their development of exploratory and decisionmaking skills.

The units help students: (1) To identify career activities as a means of life goals, (2) to use self-exploration and occupational exploration in shaping their careers, (3) to demonstrate the ability to use the decisionmaking strategy, (4) to relate personal characteristics to occupations in order to identify and evaluate career alternatives, (5) to identify major influences affecting career decisions and career development, (6) to identify ways in which the society and self interact through their careers, and (7) to demonstrate the ability to manage the variables involved in shaping a career.

Upon completion of the units, students should be able to formulate career plans which are consonant with their personal characteristics, goals, and the opportunities available.

PATTERNS OF USE

The *Career Guidance Units* form career exploration and decisionmaking activities into manageable segments for implementation into typical secondary school programs.

The first four units are addressed to the central concepts of career, self-exploration, occupational exploration, and decisionmaking. These units introduce basic exploration and decisionmaking skills within the framework of career. Students use these skills throughout the course. Units 5 through 10 use the career information system to provide experiences in exploration of worker trait groups and occupations in terms of personal characteristics. In units 11 through 13, students examine the effects of major social, environmental, and economic influences on career. The final two units help students utilize exploration and decisionmaking skills in developing or clarifying career plans, and in making tentative occupational choices.

The units may be presented as a separate course or integrated into existing subject matter areas, particularly the language arts or social studies. They may also be used by counselors or teachers with small groups. The introductory and concluding units (1-4, 14-15) should be presented in order, but the other units may be used in any sequence.

ASSESSMENT PROVISIONS

A pretest is provided to determine students' degree of knowledge and career development prior to using the units. Posttests are utilized upon completion of the units to determine whether students have mastered the objectives of the program. The counselor/teacher is provided with specific behavioral objectives against which to check students' performance of unit activities. However, procedures for evaluating unit activities are not provided.

Personnel Required for Product Adoption and Implementation

No special personnel are required for use of the *Career Guidance Units*.

ASSURANCES AND CLAIMS

The counselors/teachers at the schools participating in the 1973-74 field test of units 1-8 or those at the two schools completing the field testing of all units during the first semester 1974-75 have not indicated either orally or in writing any potentially harmful effects. Interviews have been conducted with both students and counselor/teachers to identify materials and activities they feel are inappropriate or that need to be revised.

The unit materials have been carefully developed to adhere to social fairness standards (e.g., regarding gender, racial/ethnic, religion, economic). In the 18 filmstrips, white (73 percent), blacks (21 percent), and other minorities (7 percent) are shown in proportions fairly representative of the general population. Men (60 percent) are shown in greater proportion than women (40 percent). Men and women are, however, shown in nonstereotyped roles. All ages are represented although the 14-18 age range is predominant because of the audience. Leading characters are portrayed by blacks, whites, other minorities, males, females, and persons of divergent socioeconomic backgrounds. Of the four filmstrips entered into the 1975 national vocational guidance association film festival, two were given highest ranking and the other two were recommended based upon a view of content, technical considerations, the user's guide, and social orientation.

The *Career Guidance Units* have been field tested successfully in West Virginia and Utah with no developer assistance. Additional unassisted field test sites (involving approximately 250 high school students) in West Virginia and Georgia will be completed by June 1975. For the field testing of half of the units (1-8) during the 1973-74 school year, preliminary data indicated a small but significant increase between pretest and posttest scores of students on a standardized test of career maturity and a program-specific test based on program objectives. Comparison groups showed no increase. By July 1975, data will have been analyzed from schools field testing all 15 units. This data will include pretests and posttests along with student and counselor/teacher interviews.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student booklets and handouts	1 set per student	*	Consumable	
Student summary folder	1 per student	*	Consumable	Commercial publisher to be announced
Counselor/teacher utilization guides	1 set per school	*	Reusable	Commercial publisher to be announced
Paper clip game	1 per group	*	Parts reusable, parts consumable per student	Commercial publisher to be announced
Filmstrips and cassettes	1 set per school	*	Reusable	Commercial publisher to be announced
Career information system materials	1 set per school	**	Reusable	Commercial publisher to be announced
Automatic or manual filmstrip projector/cassette tape player	1 per school	100.00-325.00	Reusable	Commercial publisher to be announced
Interest inventory and scoring	1 per student	1.00	Parts reusable, parts consumable by each student	Commercial publisher to be announced

*The estimated cost for the *Career Guidance Units* is $800-$1,000. This product includes a self-contained inservice package, utilization guides, filmstrips, and a classroom set of student materials.

**The estimated cost of the Career Information System is $500-$600, which includes multiple copies of guides, indexes, filmstrips, and decks of Keysort cards.

DEVELOPER/AUTHOR:

Career Decision Making Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

During the 1974-75 school year, field testing of the units will be completed. The materials will be revised and made available in 1976 through a commercial publisher yet to be announced.

For further information, contact:
Career Decision Making Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

CAREER INFORMATION SYSTEM (CIS)

A system designed to serve as the career information component of career education programs

The Career Decision-Making Program forms a core around which a comprehensive *Career Education Program* can be developed for the secondary school level. It is designed to help students gain greater understanding of themselves and the world of work by facilitating the development of exploratory and decisionmaking skills. The program has 2 basic products: 15 career guidance units and a supportive career information system based on the *Dictionary of Occupational Titles* (DOT), third edition, 1965.

The *Career Information System* (CIS), although used with the guidance units, may be considered a separate product. It serves as an organization and management system for career information resources. The CIS is designed to organize available resources into a common system so they are readily available and accessible to students, counselors, and teachers. It accommodates a wide range of resources such as occupational briefs, bound occupational information, audiovisual materials, VIEW, filmstrips, classroom experiences, speakers, employer site experiences, simulation, and games.

The Worker Trait Group (WTG) arrangement of the DOT is used as the basic structure of the CIS. All career information resources that can be linked with occupations or with Worker Trait Groups (WTG's) are indexed and/or filed by worker-trait groups.

Since one of the goals of career education is to expand individual awareness and understanding of the world of work, the career exploration process must include access to resources identified by means other than occupational titles. More specifically, an individual should be able to move from a base of self-understanding to related occupations. The CIS consists of basic guides, filmstrips, Keysort cards, charts, checklists, and other access materials designed to assist individuals in understanding concepts and to relate self-understanding to occupations.

SUBJECT AREA(S)

The CIS is designed so that it can serve as the career information component of career education programs. The primary focus is upon managing and accessing career information resources to facilitate exploration and decisionmaking.

INTENDED USERS AND BENEFICIARIES

The prime users are intended to be secondary school students, but the CIS is also a valuable reference for guidance counselors and classroom teachers. Although designed for the secondary school level, the CIS, with modification, could serve as the information component in postsecondary institutions or in special career education programs. Career information resources entered into the system should be either directly accessible to students or indirectly available through scheduling. The system can also accommodate materials used by teachers and counselors in planning supervised guidance activities.

GOAL(S) OR PURPOSE(S)

The major purpose of the CIS is to organize all available career information resources in a setting into a common system to provide easy student access. CIS materials are designed to assist students in clarifying their personal characteristics in terms of the worker-trait components on which access is based. The system and accompanying materials provide students a way of linking themselves to the world of work for meaningful career exploration and decisionmaking. Since meaningful career exploration should focus upon the individual, the worker characteristics may be used to develop self-understanding and insights into occupations.

PATTERNS OF USE

The CIS does not require a sequential usage pattern. The system may be used by counselors in group and individual guidance, by teachers in subject courses, or as part of a total career education program. Several access routes have been developed which facilitate the use of materials for a variety of purposes ranging from course selection to job placement. Career education, to be effective, should be infused into the curriculum with appropriate activities related to the career development needs of students. The CIS provides linkages to curriculum through a chart relating school subject areas and courses to worker-trait groups. An index has also been developed for relating WTG's and occupations to subject areas. This index includes suggestions on how teachers can relate their subject matter to career exploration activities.

A manual system for accessing occupational information on a multivariable basis has been developed through the use of Keysort cards. This manual system is a deck of 114

Keysort cards, each representing one of the worker-trait groups. Significantly related worker characteristics are punched on the cards' edges, thus providing a means for identifying all groups related to a particular variable or set of variables. By inserting a sorting needle through the coded hole for a particular variable, the related worker-trait group cards will fall from the deck. In this manner, worker-trait groups can be identified which are meaningful for each individual. This manual technique is easily adaptable to computerization. Initial efforts are being made to develop both batch and interactive computer processing as part of the CIS.

ASSESSMENT PROVISIONS

The *Career Information System* may be assessed by (1) the way in which it facilitates the storage and retrieval of all exploration resources and (2) the degree to which it contributes to meaningful career exploration and decisionmaking.

TIME REQUIREMENTS

The time requirements for setting up the CIS will depend upon the number and variety of career resources available within a setting. A minimum of 40 person-hours is required to code, index, and file occupational briefs into the system. Three major sources of commercial briefs (SRA, Chronicle, and Careers) have been indexed into the system along with other major occupational information references. An alphabetical card file and a file content notebook need to be set up for these and other available career information references.

Time requirements related to use of the CIS are dependent entirely upon the career education activities in a particular setting. Typically, each student, teacher, and counselor involved should use the system several times during a school year.

IMPLEMENTATION PROCEDURES

The location in which the system is to be installed depends upon the function it is to serve within a Career Education Program. The CIS should be readily accessible to students in a location such as a career resource center or library. Since the CIS lessens the student dependency upon a counselor or supervisor to obtain information, the setting is important. Career information resources may be located in several places, but their location can be identified through indexing procedures.

Resources are organized in the CIS by worker-trait groups. They have been assigned a sequence number which serves as an index. Occupational information can be processed into the system by using a standard method of classifying occupational titles according to their appropriate worker-trait group and by filing and indexing the sources. Detailed procedures for setting up and maintaining the system have been developed.

Maintenance procedures for the CIS are similar to those employed with any career information system. Resources need to be checked periodically to make sure they have been refiled properly, and outdated materials need to be removed from the system. Additional career exploration resources should be added to the system as time, funds, and use permit.

Two filmstrips are provided to orient teachers and students to the CIS. Each of the basic guides has an introductory section which provides information on how it may be used. Access materials may be introduced by the teacher/counselor as part of an organized career exploration activity.

Personnel Required for Product Adoption and Implementation

No special personnel are required for the use of the *Career Information System*.

ASSURANCES AND CLAIMS

The CIS is being field tested in 37 sites located in 16 States representing a wide range of geographical locations and a variety of settings. To date, none of the personnel administering the system has indicated any potentially harmful effects. During school year 1974-75, midyear and yearend evaluations will provide data on CIS use, problems, and suggestions for improvements. These evaluations will be used to revise the materials before final publication.

CIS materials have been carefully developed to adhere to social fairness standards (e.g., sexual, racial/ethnic, religious, economic). All materials have been written to an 8th-grade vocabulary level using the Thorndike/Lorge Word Frequency List.

The CIS can be installed by school personnel. In several cases, students and teacher aides have been used. A spot check on the accuracy of installation revealed only minor errors. A checklist was subsequently provided to all installation sites to eliminate these errors.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed*	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Guide to CIS Filing and Indexing	1	**	Reusable	Commercial***
Basic guides (2)	10 each	**	Reusable	Commercial***
Student booklets (2)	35 each	**	Reusable	Commercial***
Indexes (3)	2 each	**	Reusable	Commercial***
Checklists (4)	35 each	**	Consumable, 1 set per student	Commercial***
Filmstrips (6)	1 each	**	Reusable	Commercial***
Charts and posters (2)	1 each	**	Reusable	Commercial***
File content notebook and preprinted forms	1	**	Reusable	Commerical***
Keysort cards	2 decks	**	Reusable	Commercial***
Card file and index cards	1	25.00	Reusable	Commercial
DOT, Vols. I and II	2 each	10.00	Reusable	U.S. Government Printing Office, Washington, D.C. 20402
File cabinet	1	50.00	Reusable	Commercial
Commercial occupational briefs	1 set	75.00	Reusable	Commercial

*Quantity needed for use with classroom size groups.

**Cost for materials to set up CIS for use with classroom-size groups is estimated at $500-$600. Consumable materials per student depend upon number of checklists used and commercial tests and inventories administered.

***Publisher to be announced.

DEVELOPER/AUTHOR:

Career Decision-Making Program
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, W.Va. 25325

AVAILABILITY

During the 1974-75 school year, field testing of the CIS will be completed. The materials will be revised and made available in 1976 through a commercial publisher, yet to be determined. For further information contact:

Career Decision-Making Program
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W.Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 015

OPERATION GUIDANCE (AN ELEMENT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)

A self-help program aimed at providing high schools with the capability to improve career guidance programs

Traditionally, the responsibility of helping students with career planning has been shouldered by schools. Unfortunately, high school career planning services, in general, have been either nonexistent or relatively ineffective. The primary medium for delivering career-planning assistance to students has been career guidance programs. However, limited national assessments of career guidance programs, such as those conducted by Herr (1968), Ehrle (1969), Gelatt (1969), Rosen (1969), and Ginzberg (1971), have indicated that career guidance programs have been neither effective nor efficient. Campbell, after a national survey (1968), concluded that high schools attempt to offer more career guidance services than they can effectively support with available and realistically obtainable resources.

Operation Guidance is a self-help program aimed at providing high schools with the capability to improve the career development skills of their students. As an educational innovation, it sets the climate for improving career planning programs by outlining systematic yet practical procedures for improvement. The *Operation Guidance* process encourages administrators, teachers, parents, and students to participate in defining local career development needs, restructuring priorities, and developing ways to help students. The systems approach enables a school to organize resources, career planning information, and strategies into a manageable efficient structure.

The *Operation Guidance* product includes: (1) Guides detailing procedures for staff organization, collecting data, deriving career development goals, formulating behavioral objectives, creating career development units, and evaluating the career planning programs; (2) survey questionnaires and other evaluative instruments; (3) manuals that provide information and background for performing technical tasks; and (4) supporting references (e.g., a handbook of career guidance methods). The materials are written so that a school may progress according to the amount of time and personnel it has available for *Operation Guidance*. Much of the process, initially, involves careful planning. Tangible results usually occur during the first school year of participation.

Operation Guidance is more than a package of instructions. It is a formula for joining people into a productive, effective force for the school. Community review and advice are gained through an advisory committee. The product is compatible with existing high school career development programs. Rather than ignoring current efforts, the project provides a framework for making existing programs more effective, as well as creating additional services.

SUBJECT AREA(S)

Teacher and counselor training, administrative systems, curriculum, and student career development skills are gross areas of product concern. Since the product is intended to enable a subpopulation of the school to upgrade career development skills of students, there is potential for implementation of student learning activities into any subject area. The potential exists for the product to act as a coordinating mechanism for all career education activities.

INTENDED USERS AND BENEFICIARIES

A subpopulation of the comprehensive senior high schools, which could include teachers, counselors, administrators, and students, deals with the management and/or the execution of the various tasks that constitute the product. Senior high school students of all abilities should benefit when the product is used as intended to upgrade the schools' career planning program.

Although primarily designed for a comprehensive senior high school (approximately 200 students per grade level), the product appears to be adaptable to smaller schools based on observations of the first 5 months of a national field test. There is not, however, sufficient field test data to rate the success of the product in the smaller school. The developers feel the product could be modified for use at levels both above and below the senior high school.

GOAL(S) OR PURPOSE(S)

Operation Guidance is intended to enable the instrumental population: (1) To identify student needs for career development; (2) to derive program goals from statements of student needs; (3) to derive behaviorally stated objectives from the program goals; (4) to implement guidance or instructional methods that will enable students to achieve the selected objectives; and (5) to install a subsystem for collecting, analyzing, and reporting evaluative information on student achievement of behavioral objectives, changes in the resources available for supporting career development activities, and changes in student needs. If outcomes one through five are realized, the resulting career development program should have the following characteristics: (6) Increased use of inschool resources if previously underutilized, (7) increased use of community resources if previously underutilized, and (8) career guidance services and related instructional activities that are efficiently supported by available resources and are optimally responsive to student needs.

PATTERNS OF USE

Operation Guidance is constructed in a detailed, semiprogramed instructional format. It assumes a minimal skill level among school personnel in terms of project management, systems planning, data collection, data interpretation, program development, and program evaluation. It is, however, flexible enough to permit a school that has an existing program to adapt the product to its own needs. The product is self-contained and is intended for use by the school without reliance on outside consultants. (Current field testing indicates some schools need a small amount of technical assistance.)

Operation Guidance details procedures for organizing faculty, students, and members of the community to accomplish program development tasks. These tasks are: (1) Identifying needs and resources; (2) stating, ranking, and selecting program goals; (3) deriving behavioral objectives; (4) selecting career development methods; (5) planning and implementing career development units; and (6) evaluating the effectiveness and efficiency of the program.

Survey questionnaires are administered to students to determine their career development needs. More general questionnaires are also completed by parents, faculty, and graduates of the school who identify the type of career development areas that the high school should emphasize. The survey questionnaires enable the school to identify the strengths and weaknesses of its career planning program and the needs of its students.

Information about the school and community that might be of value to the career development program is collected. Identified needs are translated into goal statements. These goals describe general skills, information, and attitudes students need to choose and achieve a career. Goals are based on information collected in the surveys, State and local educational requirements, career development activities already going on in the school, and additional data the school may have collected. Career development activities will be designed for students to help them achieve these goals. Because sufficient resources may not be available to support learning activities for all of the goals immediately, the goals are ranked in order of importance. Usually goals of greater importance are selected before those of lesser importance, if there are resources to support them.

An advisory committee reviews the goals, the priorities assigned to them, and the selection of goals for implementation. Recommendations may be made to improve the goals. The principal reviews and, if appropriate, approves the goals, assigned priorities, and selected goals for implementation. A coordinator is chosen to oversee the development and implementation of activities for each goal that has been selected. With the assistance of two persons skilled in writing behavioral objectives, each coordinator writes the criterion objectives for each goal to be implemented. These objectives state what behavior students are expected to exhibit after participating in the career development activities designed for the goal.

Although behavioral objectives define what students are to achieve, schools have to choose ways for the objectives to be achieved. There are usually many ways to achieve each objective. The task is to choose instructional methods that are appropriate to the groups of students participating in the career development activities. In addition, the methods chosen should use a school's resources efficiently.

All goal-related information is collected into a formal plan for a career development unit or units (CDU's). A CDU is a learning unit that attempts to achieve one goal or a logical set of career development goals that have been selected. The plan developed for a CDU identifies the behavioral objectives that have been written for each goal, the instructional methods and resources that will be used for each objective, and the manner in which a CDU will be installed into the curriculum. This career development plan is subject to the principal's final approval.

ASSESSMENT PROVISIONS

Three levels of evaluation take place in the *Operation Guidance* system. First, at the completion of each career development unit, students participating in the activities evaluate the usefulness of the information presented for each behavioral objective and the effectiveness of the methods used to communicate this information. The person in charge of the CDU evaluates the extent to which each behavioral objective of the unit was achieved by the students involved. The information can be very helpful in indicating revisions that might be made to increase the effectiveness of the CDU. Second, an annual review of all career development units that have taken place during the year is conducted by the steering committee. A CDU could be expanded to involve more students in the career development activities, or changes might be made in the way resources are allocated. The third level of evaluation is called recycling. It is designed to make certain that the career development program continues to meet students' needs. The career development needs of students may change over time. Therefore, every 2 years the surveys are again administered. Several adjustments in the career development program could result, e.g., the priorities assigned to goals could be changed, the list of behavioral objectives for a given goal could be revised, a CDU could be expanded or eliminated.

TIME REQUIREMENTS

Normally, a school can generate career development units during the first year with *Operation Guidance*. A school may use the product on a continuing basis as a means of monitoring, evaluating, and, if necessary, upgrading career guidance services to students.

IMPLEMENTATION PROCEDURES

To undertake the *Operation Guidance* project, the school administration should be prepared to commit at least a half-time person to coordinating the project for each school. Approximately 1-1/2 hours per week per school year should be allowed for each of the five to seven permanent steering committee members.

Field work indicates the product probably will not work well in high schools that lack clear and continued administrative support for the project, do not have flexibility to effect change, and/or have a generally unstable environment (e.g., strikes and low morale).

Personnel Required for Adoption and Implementation

The appropriate number of positions and the estimated time commitment that incumbents in the positions would need to spend during each year of the project are as follows: (1) 5 to 7 steering committee members (3 to 5 faculty/staff members and 2 students) at an average of 1-1/2 hours per week, (2) a school coordinator at an average of 50 percent time, and (3) 40 task force members (16 to 20 faculty/staff members and 18 to 20 student members) at an average of 2 hours per week for 8 to 10 weeks.

An individual may occupy more than one position. Also, total number of people could be scaled downwards if the number of students in the school is fewer than 600.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

The product necessitates personal interactions among teachers, counselors, students, and administrators. Also, there is interaction with the community. Every precaution has been taken to minimize the risk that these interactions may incur. Procedures have been written at every point to prevent negative consequences of interactions. In addition, the entire product has received the approval of the center for vocational education's protection of human subjects committee, established in accordance with Health, Education and Welfare (HEW) and Ohio State University guidelines (most recent approval was January 20, 1975). All data generated by the product received Office of Management and Budget clearance on September 12, 1974 (No. 51-R1080). Finally, the potential for benefit from such interactions is quite evident.

Assurances of Social Fairness

An important principle of the product is that career development assistance be made available to all students in the high school. This principle provides the basis for assurances of social fairness and no social biases in the following ways. The product orients itself neither toward vocational education nor college preparation, but rather emphasizes a broad set of career development skills useful to all students. The product calls for the analysis of some needs assessment information by sex and ethnic group, in case a particular subgroup needs special career guidance techniques. The product includes a checklist for reviewing existing career development materials, on which there is a question about the characteristics of previous student users.

Assurances of Replicability or Transportability

Assurance of transportability can be made as a result of the product field test, where developer control has been minimized. The developer trained 1 State-level person and 1 person from each school's staff once at the onset of product use (12 States and 42 schools are in the field test). The developer has dealt primarily with the State person, who has monitored and consulted with the school people. To date, schools have been able to use the product successfully under these conditions. Two qualifications need to be made to this assurance: (1) Occasional external assistance may be required, depending on the general competency of school personnel once they have decided to use the product and (2) training of one person within the school is required before use of the product, to the extent that the person be well-rounded in all aspects of the product.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Steering committee handbook	2	To be announced	Reusable as guide to project operation	
Staff development handbook	1	To be announced	Reusable for inservice training	
Camera-ready materials	2 sets	To be announced	Reusable	
Career development data	1	To be announced	Reusable	
Principal's handbook	1	To be announced	Reusable	
Advisory committee handbook	10	To be announced	Reusable	
Resource assessment procedural guide	1	To be announced	Reusable	
Data collection procedural guide	1	To be announced	Reusable	
Data tabulation procedural guide	1	To be announced	Reusable	
Behavioral objective procedural guide	6	To be announced	Reusable	
Behavioral objectives manual	6	To be announced	Reusable	
Methods analysis procedural guide	2	To be announced	Reusable	
Career development units procedural guide	10	To be announced	Reusable	
Audiovisual presentation	5	To be announced	Reusable	
Printing	Pages equal to approx. 8.5 per student		Consumable every 2 years	Implementer
Duplication	200 copies		Consumable every 2 years	Implementer
Postage (optional)		100.00	Consumable every 2 years	Implementer
Office supplies (excluding paper for reproduction)	2 reams of letterhead		Consumable every 2 years	Implementer
Envelopes	1,400		Consumable every 2 years	Implementer
35mm sound-slide synchronizer/projector (optional)	1		Reusable	Implementer

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Campbell, Program Director
Harry N. Drier, Work Unit Director

AVAILABILITY

The entire *Operation Guidance* product is undergoing a national field test, which is scheduled for the 1974-75, 1975-76 school years. The product is under developmental copyright to The Center for Vocational Education granted through June 1976 by the National Institute of Education. Dissemination plans for the product are under development.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 080 016

COMMUNICATION AND YOU

A teacher guide to allow intermediate students to discover the complexities of communication

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

It consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in a guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary activities.

Intermediate level students, in decoding each other's messages and discussing their attitudes and feelings, discover the complexities of communication. They practice communication skills in role-playing situations and develop adjustment skills needed when interpersonal differences must be resolved.

SUBJECT AREA(S)

The subject area for which the materials in this guide have potential is language.

The topics covered in *Communication and You* are: Communication symbols; language—a communication tool; the communication process—elements and types; successful communication; forming, identifying, and changing attitudes; the interdependency of persons; adjustment skills; coping with different viewpoints; and identifying interrelationships.

INTENDED USERS AND BENEFICIARIES

The materials in *Communication and You* were developed for students in grade 7.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff-development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and open classrooms.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in *Communication and You* will: (1) Understand that language is a system of symbols used to represent ideas as a means of acquiring communication skills; (2) explore the nature of language as an effective method of conveying ideas in order to develop an awareness of communication skills; (3) identify the basic elements of communication and explore various methods of communicating in order to develop communication skills; (4) develop an awareness of the importance of successful communication and the factors that can interfere with it in order to recognize the necessity for a variety of communication skills; (5) explore the concept of "attitude" and recognize how attitudes are formed and changed as a means of developing an awareness of the variety of attitudes one displays; (6) recognize how attitudes and the way they are communicated affect both interpersonal relationships and group processes as a means of identifying how attitudes can be interpreted; (7) recognize that each individual is unique and appreciate the worth of different value systems as a means of understanding that interpersonal relationships can be formed among people with basic differences; and (8) appreciate the rights and responsibilities of others, recognizing that each individual has a function in the group and that others rely upon the individual to complete an accepted task or job as a means of understanding the interlocking structure of roles in society and how the complex of interlocking roles contributes to the student's way of life.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others, or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. Where concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally, the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Communication and You	1 per teacher	7.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977.

***Communication and You* is available from:**
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

RD 080 017

JUST ME

A teacher guide for helping 1st-grade students realize that individuals are unique

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide was developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guide is career awareness and exploration.

The guide consists of sets of student learning experiences that focus on various elements of career education or beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary activities.

The idea that being a self involves being different is the unique focus of *Just Me*, which was designed for use at the early primary level. Students note in their booklets their unique aspects as influenced by physical characteristics, family, friends, and interests. Using the familiar environment of the school, students assess capability of self in relation to a variety of assigned classroom tasks and tools.

SUBJECT AREA(S)

The materials in *Just Me* apply to the communication arts such as English, speech, and language. The topics covered include: "Who I Am," "My Body," "My Characteristics," "How My Body Functions," "My Senses," "My Family and Me," "My Family Duties," "My Promise Book," "My Friends and Me," "Things I Do," "How I Perform Tasks," and "How I Use Tools."

INTENDED USERS AND BENEFICIARIES

The materials in *Just Me* were developed for students in grade 1. Potential users of career education teacher's guides are teachers in grades K - 12. Other possible users are teacher educators in colleges and universities, staff-development personnel in schools, and personnel in State departments of education.

The learning experiences are adaptable to multigrade groupings and the open classroom.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in *Just Me* will: (1) Recognize that they possess characteristics which are unique and distinguishable from other human beings; (2) examine their own facial characteristics, exterior body parts, functions of these parts of the body, and five senses in order to develop awareness of the body as a unique self; (3) develop the ability to communicate the relationship between self and family as a means of becoming more fully aware of that relationship; (4) realize that once a task or job is accepted, there are certain responsibilities to self and others as a means of recognizing the importance of behaving responsibly, fulfilling promises, and contributing to the family; (5) realize that going to school helps them learn to do things for self and others; and (6) understand the relationship between the availability of tools and the performance of a learning task and become aware of their ability to use instruments (tools) to perform learning tasks.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable, and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Just Me	1 per teacher	6.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977.

***Just Me* is available from:**
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 018

INSTRUCTIONAL HANDBOOK: COPING IN THE WORLD OF WORK: PRACTICE IN PROBLEM SOLVING (CPSS) (A PRODUCT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)

An instructional unit designed to ease the transition of 11th- and 12th-grade students from school to work

This instructional unit, *Coping in the World of Work: Practice in Problem Solving*, has been designed to meet the deficit in viable techniques available to help students acquire coping skills that will facilitate their transition from school to work. The unit is designed: (1) to acquaint students with the range of work entry and job adjustment problems they will encounter in making the transition from school to work, (2) to familiarize students with the five-step problem-solving process, (3) to apply the problem-solving process to real-life simulated practice problems, and (4) to apply the problem-solving process to real problems outside the classroom. The unit is evolved from specific behavioral objectives and involves each student in a variety of structured group experiences such as role playing, sociodramas, brainstorming exercises—to aid them in discovering their own, individual courses of action in solving simulated problems.

The five-step problem-solving process involves: (1) Diagnosing the problem, (2) generating alternative solutions, (3) evaluating the solutions, (4) choosing a solution, and (5) validating (testing) the solution.

Included with the unit are a self-instructional manual for the instructor, student guides, filmstrips, transparencies, and all handout materials. The unit is designed for 11th- and 12th-grade students.

SUBJECT AREA(S)

Since the unit addresses a heretofore unattended area, it may best be explained by listing the titles and page lengths of the manual. Each of the five steps in the five-step problem-solving process has been further broken down into more easily assimilated parts. The following list is current as of the date of this entry but may be altered during the final revision process.

Introduction
- I. Foreword (3 pages)
- II. Student Behavioral Objectives (2 pages)
- III. Student Orientation to the Unit (7 pages)
- IV. Discussion Questions (1 page)
- V. Outline of the Five-Step Problem-Solving Process (1 page)

Content and Process
- VI. Step I-A—Work Entry and Job Adjustment Problems (19 pages)
- VII. Step I-B—Value of Early Detection and Proper Diagnosis (15 pages)
- VIII. Step I-C—Causes and Symptoms (24 pages)
- IX. Step I-D—Information Sources for Problem Identification (30 pages)
- X. Step I-E—Problem Writing (10 pages)
- XI. Step II—Generating Solutions (15 pages)
- XII. Steps III and IV—Evaluating the Choosing Solutions (40 pages)
- XIII. Step V-A—Validating Solutions (33 pages)
- XIV. Step V-B—Practice in Problem Solving (18 pages)

INTENDED USERS AND BENEFICIARIES

The principal beneficiaries of this product will be 11th- and 12th-grade high school students. The instructors involved may be teachers, counselors, administrators, paraprofessionals, parents, and others connected with high school students. This is easily accomplished through the use of the instructor's manual, which is self-instructional in nature. Schools that will use the unit are all high schools—general, vocational, and comprehensive. Although the product is chiefly designed to answer the needs of 11th- and 12th-grade students, with modifications the range of potential beneficiaries could include 9th- and 10th-graders, college students (both community and 4-year institutions), postsecondary technical/vocational schools, community and State-level training centers, and correctional/penal institutions.

GOAL(S) OR PURPOSE(S)

At the conclusion of this unit, students will be able: (1) To list and briefly describe 10-15 problems commonly encountered in the transition from school to work; (2) to detect situations or events in an exercise that define potential and/or fully developed job adjustment problems; (3) to identify and distinguish between causes and symptoms in a job adjustment problem; (4) to identify information sources, and rank and rate their accessibility and value in a job adjustment problem; (5) to develop, from personal experience or imagination, a case study depicting a job adjustment problem which incorporates causes, symptoms, and information sources used in diagnosing the problem; (6) to list alternative solutions for a job adjustment problem and establish criteria for an optimum solution to a job adjustment problem; (7) to describe the information needed and list available sources of information necessary to implement a given solution to a job adjustment problem; (8) to rank their solutions in terms of the feasibility for implementation and usefulness for solving a job adjustment problem; (9) to choose a solution to a job adjustment problem and state reasons for selecting that solution which will include references to the feasibility and usefulness rankings of the solution; (10) to validate attempted solutions by comparing their results with previously established criteria; and (11) to recycle through the problem-solving process when it is determined that an attempted solution has failed.

PATTERNS OF USE

This instructional unit may be used with a variety of curricular areas such as English, any vocational education course, career education courses, or group guidance. It must be used sequentially. All materials are provided (excluding audiovisual devices) for 30 students. The package is completely reusable with spirit masters being provided for any consummable items.

ASSESSMENT PROVISIONS

There is no formal test provided, however, it is recommended that principally work-bound 11th- and 12th-grade students be considered in using this unit. In addition, written exercises based on behavioral objectives are provided throughout. These can be used as graded exercises by the instructor.

TIME REQUIREMENTS

The minimum time limits involved are 10 class periods of 45 minutes each. The unit may be easily expanded to 20 periods of the same length, with the materials included in the unit. Using recommended supplemental materials from other publishers, the unit can be developed into a 30-period course. It is recommended that the unit be used daily and not interrupted (except by holidays) until its completion. As noted earlier, the instructional unit is totally self-instructional for the instructor and requires approximately 10 hours of self-preparation.

IMPLEMENTATION PROCEDURES

There are no special equipment, facilities, services, or organizational requirements necessary to implement this unit. The unit comes with all necessary materials for 30 students and is reusable. All consummable items are printed on spirit masters so that those items can be duplicated as many times as necessary.

Summary Cost Information

The approximate cost of the unit per 30-student classroom will be $75-$100. One complete set of materials will be provided at this price, but additional replacements, e.g., student guides, instructor's manuals, can be purchased individually as the need arises.

Personnel Required for Product Adoption and Implementation

One instructor who can be a teacher, counselor, parent, paraprofessional, administrator, or other interested person is required. Ten hours of self-instruction are required, together with minimal skills in leading small discussion groups.

ASSURANCES AND CLAIMS

This product has been pilot tested at a local vocational school and has undergone formative product engineering testing at the same school a year after the pilot test. Undergoing revisions for the summative product engineering phase of testing involved a major decision event review and both internal and external consultants. The formative phase was accomplished with staff members used as observers only while the summative phase had no staff assistance except for the administration of the pretest and posttest. Clearly, the product is transportable. All student and instructor critique forms indicated positive feelings about the usefulness of the product, but most responses indicated that the unit was "too long and boring." As a result, the essential unit length is being reduced, while maintaining the integrity of the behavioral objectives.

The materials demonstrate no forms of sexual, racial, or general social biases, this fact being based on verbal and written reports by instructors, students, and consultants.

Additionally, no main or side effects that could be construed as producing harm were noted by any teacher or observer during the pilot test, formative product engineering phase, or summative product engineering phase of testing. Since no other strategy exists that addresses this problem and this group of users, there can be no common comparison alternatives.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructor's manual	1 per instructor	To be announced	Reusable	
Student guides	1 per student	To be announced	Reusable	
Filmstrips	2 per set	3.60 per set	Reusable	
Sound cassettes	2 per set	4.00 per set	Reusable	
Spirit masters of all consumable items (handouts, self-checks, etc.)	1 set	To be announced	Reusable	
Transparencies	1 set	To be announced	Reusable	
Storage box for materials	1 per set	To be announced	Reusable	
Storage box for filmstrips and cassettes	1 per set	To be announced	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Campbell, Program Director

AVAILABILITY

The completed materials will be available nationally on December 1, 1975; final revisions are currently underway. The product is under developmental copyright to the Center for Vocational Education granted by the National Institute of Education. Final copyright and publisher information will be available fall 1975.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 019

MYSELF AND OTHERS AT HOME AND SCHOOL

A teacher guide to encourage students in grades 1-3 to deal with an expanded idea of self

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

Within the context of family and school, students in primary grades are encouraged to deal with an expanded idea of self. This self becomes aware of its involvement in an institution called family and of the many different roles played by family members to achieve a variety of goals. Interdependency and responsibility are explored. These basic concepts are then applied to another familiar institution, the school. The concept of occupational roles is carefully developed.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are social studies and language arts.

The topics covered in this guide are: Family structure and activities performed in the home, interrelationships of family functions, interdependency and responsibility in the family, role performance in the home, family members and their jobs, living in a school, children in a school, school functions and occupational roles, and interdependency and responsibility in the school.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 1 - 3.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The student completing the learning sets in this guide will: (1) Explore how the structure of a family affects the way it functions; (2) demonstrate an awareness that family functions are interrelated and based on the principle of division of labor; (3) become aware that since family members are interdependent, they are responsible to one another; (4) recognize and describe characteristics of a role performance in the family; (5) become aware of the jobs that family members perform outside the family; (6) demonstrate knowledge of the school's physical structure as it relates to a variety of school members performing various school functions; (7) define student roles performed in school and identify relationships between the students' family roles and school roles; (8) gain information about occupational roles performed in the school and develop understanding of the ways in which occupational roles are similar to living patterns within the home; and (9) recognize that interdependency and mutual responsibility are necessary components of living together in a school community.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

RD 080 019

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Myself and Others at Home and School	1 per teacher	8.00	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Myself and Others at Home and School* is available from:

Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 020

SELF-APPRAISAL FOR DECISION MAKING AND CAREER PLANNING

A teacher guide intended to lead the secondary-level student to self awareness

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K-12. The theme of the guidebook is career awareness and exploration.

The guide consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in the guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary programs.

The learning experiences in this teacher's guide are intended to lead the secondary-level student to self-awareness, particularly in relation to the student's interests, aptitudes, achievements, and values. Each student has the opportunity to explore processes of planning and the prerequisites for career decisions.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are: English, language arts, social studies, and communications.

The topics covered in this guide are: Personal interests and achievements; personal and societal values; understanding success; prerequisites for careers such as interests, abilities, and achievements; exploring the decisionmaking process; values, needs, and lifestyle; occupational costs, rewards, and characteristics; and job applications and interviews.

INTENDED USERS AND BENEFICIARIES

The materials in this guide were developed for students in grades 9 - 12.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts. The learning experiences are adaptable to multigrade groupings and the open classroom.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in this guide will: (1) Identify individual interests and achievements in order to understand their relationship to each other and to past experience; (2) identify personal and social values and consider them with respect to interests and abilities as a means of developing self-awareness and understanding of values; (3) examine factors which lead to or hinder success in order to develop the understanding and sensitivity to cope effectively with both success and failure; (4) analyze the interests and abilities of oneself and others in relation to achievements as a means of recognizing that each individual possesses a unique combination of interests and abilities; (5) develop skill in assessing oneself in relation to the environment as a means of setting reasonable and obtainable goals while realizing that goals may need to be modified in response to a changing environment; (6) become aware that personal values determine the standard of living which an individual may wish to attain and that the rewards of a job vary with the requirements and responsibilities of the job; (7) examine specific characteristics of occupations in order to make tentative decisions about long-range career possibilities and determine what is currently required to achieve them; and (8) simulate an employment interview in order to gain awareness of the importance of appearance, speaking ability, general self-confidence, and preparation for the interview.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. When concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation as to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Self-Appraisal for Decisionmaking and Career Planning	1 per teacher	5.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977. *Self-Appraisal for Decisionmaking and Career Planning* is available from:
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 021

UNDERSTANDING SELF

A teacher guide to learning experiences for students in grades 8-10 to increase self-perception and career awareness

With the foundation provided by the *Comprehensive Career Education School Based Model,* this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K - 12. The theme of the guidebook is career awareness and exploration.

It consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in a guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary activities.

Self-perception is significant particularly to secondary students who are exploring occupations and experiencing decisionmaking. By examining factors that influence their feelings—including values, interests, abilities, and achievements—students form a composite of themselves. The composite may or may not be validated when students compare the composite with others' perceptions of themselves. Discussions about goals and leisure activities conclude students' indepth look at self and their review of decisionmaking skills.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are guidance, social studies, communications, and home economics.

The topics covered in *Understanding Self* are: Factors that influence feelings, understanding ourselves and others, exploring occupations, considering occupational goals, values and value systems, values and conflict situations, defining and setting goals, analyzing characteristics and self-assessment, and leisure time and self-understanding.

INTENDED USERS AND BENEFICIARIES

The materials in *Understanding Self* were developed for students in grades 8-10.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff-development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and open classrooms.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in *Understanding Self* will: (1) Identify typical reactions to situations as a means of developing an understanding of which factors influence one's feelings; (2) develop an awareness of one's individual characteristics as a means of acquiring a fuller understanding of self; (3) become aware of the concepts of personality and self-image as a means of improving understanding of oneself and others; (4) become familiar with potentially satisfying careers as a step toward finding an occupation that complements one's self-concept; (5) identify likes and dislikes related to occupational goals for the purpose of realizing that interests influence career satisfaction; (6) expand the concept of "value" to rank one's personal values and recognize that values are unique to each individual in order to develop further an understanding of self; (7) recognize that values and emotional responses are interrelated and that awareness of such interrelationships is useful in identifying problems and their possible solutions; (8) expand the concept of "goal," and recognize the types and purposes of goals and the influence they have on an individual in developing understanding of self; (9) become aware of personal characteristics in order to evaluate oneself in relation to one's goals; and (10) identify one's leisure activities and explore reasons for pursuing them in an effort to round out understanding of self.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others, or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. Where concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally, the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Understanding Self	1 per teacher	5.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977.

***Understanding Self* is available from:**
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 022

YOUR PERSONALITY, YOUR HEALTH, YOUR JOB

A teacher guide to learning experiences for students (grades 8-11) that focus on various elements of career education

With the foundation provided by the *Comprehensive Career Education School Based Model*, this teacher's guide is one of those developed to provide teachers with exemplary career education curriculum materials for grades K - 12. The theme of the guidebook is career awareness and exploration.

It consists of sets of learning experiences for students that focus on various elements of career education, including beginning competency and skills. Each learning set in a guide contains the student's objective, an overview, a resource list, the teacher's preparation tasks, the learning activities, and some suggestions for evaluation-summary activities.

Although some of the guides deal indirectly with topics such as communication and factors influencing behavior, this guide amplifies these topics for secondary students. In addition, the student is encouraged to develop a thoughtful approach to setting meaningful standards (for personal hygiene, nutrition, and diet) and maintaining physical fitness in work. Two other topics considered in greater detail are work satisfaction and rights and responsibilities.

SUBJECT AREA(S)

Subject areas for which the materials in this guide have potential are health, communications, and guidance.

The topics covered in *Your Personality, Your Health, Your Job* are: Nonverbal communication, personal hygiene, nutrition and diet, physical fitness and work, self-satisfaction and work satisfaction, and rights and responsibilities.

INTENDED USERS AND BENEFICIARIES

The materials in *Your Personality, Your Health, Your Job* were developed for students in grades 8 - 11.

Potential users of career education teacher's guides are teachers in grades K-12. Other possible users are teacher educators in colleges and universities, staff-development personnel in schools, and personnel in State departments of education.

The ultimate beneficiaries are the students who will be influenced by the creative activities and career education concepts.

The learning experiences are adaptable to multigrade groupings and open classrooms.

GOAL(S) OR PURPOSE(S)

The students completing the learning sets in *Your Personality, Your Health, Your Job* will: (1) Become familiar with nonverbal communication and its role in relationships with others as a means of increasing self-awareness; (2) describe and discuss the major influences in one's own life as a means of demonstrating recognition of those influences and appreciation for their important role in the process of "becoming"; (3) examine personal hygiene advertisements and discuss the importance of personal hygiene to the individual as a means of cultivating objectivity toward commercial influences on us and developing personally relevant standards of hygiene; (4) compare typical and recommended teenage diets in order to develop awareness of the need for food that contributes to a nutritional diet; (5) analyze the role of physical fitness in occupational success and identify habits that promote physical fitness; (6) analyze an occupation in terms of its demands, rewards, and satisfactions as a means of developing understanding of the importance of self-satisfaction and work satisfaction in attaining a rewarding lifestyle; and (7) discuss rights and responsibilities of the worker, especially in relation to work satisfaction and self-satisfaction, in order to become better acquainted with their benefits to the worker and to society.

PATTERNS OF USE

The teacher will find activities adaptable to a variety of classroom settings; some optional activities involve students in community locations. In addition, these materials can supplement others, or can be used as a complete unit of study. The teacher's guide explains its format but urges the teacher to consider modification when student needs, interests, and learning abilities necessitate change. Student objectives and the order of presenting the sets can be modified; the teacher can be selective in the choice of activities and approach to assessment.

ASSESSMENT PROVISIONS

In the explanation of format, the guide describes its approach to evaluation of students. Each learning set provides several options for assessment, including specific exercises to measure learning. Where concepts treated are subject to individual interpretation, the teacher is asked to consider recording observations of student learning and growth. The suggestion is made that the teacher allow students to evaluate, review, explain, and critique their own work at various stages.

TIME REQUIREMENTS

In keeping with the premise of variability among classes, the teacher's guide suggests that time limits be set by the teacher.

IMPLEMENTATION PROCEDURES

In the explanation of format and introduction of each learning set, guidelines offer direction to the teacher. In most cases, this orientation is sufficient explanation for the teacher's use of the materials. The methods and strategies used are those within the repertoire of most teachers.

Use of the materials by some teachers will improve with an orientation to the purpose and objectives of career education. Teachers may wish to review some methods and strategies with which they feel uncomfortable.

ASSURANCES AND CLAIMS

Originally, the center contracted with six local educational sites to develop career education materials for grades K-12. Working with the site personnel, the center developed a matrix as a foundation for curriculum materials. The curriculum products that followed went through a series of pilot testing and revision experiences coordinated by the center.

The teacher's guides referred to in this catalog were developed from the original products that were field tested in several geographical areas and with students from a variety of economic backgrounds. Information concerning the field tests of the original materials is available from the developer.

After field testing by students, teachers, and professional staffs, the original products were revised and/or rewritten to reflect field test data. This effort included a review of sex and racial biases in the materials. Consequently, the materials appear to display no social bias; they may be adapted to special needs and interests of students; they are transportable; and they are based on both practical and theoretical considerations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Your Personality, Your Health, Your Job	1 per teacher	7.50	Reusable	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Taylor, Director

AVAILABILITY

The teacher's guides were copyrighted in 1974, and copyright is claimed until January 1, 1977.

Your Personality, Your Health, Your Job is available from:
Product Utilization Section
Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 023

SELF-DIRECTED CAREER PROGRAM (SDC)

A vocational guidance system designed to provide effective, theoretically based guidance at a low cost

The *Self-Directed Career Program* (SDC) is a vocational guidance system designed to provide effective, theoretically based guidance at a low cost with a minimum expenditure of counselor time. SDC consists of the following materials for students: (1) Instruction sheet, which explains the program and tells a student how to proceed; (2) SDS assessment booklet, which provides a vocational guidance experience that a student undergoes individually for about 1 hour; (3) occupations finder, which lists a total of 456 occupations that are coded according to the theoretical system used in the SDS; (4) checklist, which helps a student check the accuracy and validity of the SDS experience; and (5) occupational outlook handbook, which provides comprehensive descriptions of jobs and careers.

The above describes the basic SDC program. The program manual contains instructions and suggestions to supplement and integrate the program with other materials—Krumboltz experience kits, *Career Planning Manual* (Cosgrave and Dick), *Deciding* (CEEDB), and SRA occupational briefs. The manual also contains instructions for organizing counseling materials using the theory upon which the SDC program is based.

The program requires that one counselor be available for consultation with those students or adults who desire further guidance after undergoing the SDC experience.

SUBJECT AREA(S)

The SDC program is applicable to career guidance.

INTENDED USERS AND BENEFICIARIES

Counselors and guidance personnel in junior and senior high schools and colleges can serve as "managers" of the SDC. The ultimate beneficiaries of the SDC are the students in junior and senior high schools and colleges. The reading grade level of the SDC, the interest inventory incorporated in the SDC, is 7th-grade reading level.

GOAL(S) OR PURPOSE(S)

There are not enough counselors to provide vocational guidance for everyone, and it is unlikely that sufficient funds for this traditional form of help will ever be available. Counselors need a vocational guidance system that will multiply their time and talent so that a single counselor can cope with a large population of students or adults. The extension of vocational help to all who need it must be accomplished at the lowest possible cost in materials, equipment, and training time. And, equally important, any new system should possess a high degree of scientific validity and client effectiveness. These are the goals of the SDC program.

PATTERNS OF USE

The student materials should be arranged on a table or desk in the order listed in the narrative description. Depending on need, opportunity, and financial resources, one or more layouts could be located in appropriate places (e.g., counseling offices, libraries, student study rooms). A sign should identify the system and invite students to use it. Also, a sign-in sheet may be included so that the number of students using the materials can be recorded and the system monitored and evaluated.

The student's first step is to pick up an instruction sheet. After reading the instructions, the student proceeds as follows:

Step 1—Takes a copy of the SDC and a copy of the occupations finder. The student reads the instructions on the outside cover of SDC and then begins the guidance experience by filling out the occupational daydreams section. The student works through the booklet and computes the summary code. This code identifies the characteristics that distinguish interests, competencies, experience, and self-concept. Proceeding, the student is instructed to search the occupations finder to see which occupations match the summary code. These are the occupations that are best suited to the student's particular characteristics. A list is made of these occupations.

Step 2—The student then takes a copy of the sheet entitled "Making the SDS Work for You." Using this sheet, the student rechecks the work in the assessment booklet, is reminded to search the occupations finder for all permutations of the summary code, and is reminded that the list of occupations should number at least five. The student is then instructed to compare the summary code to the code of the occupational choice that was initially made in the assessment booklet. If the summary and choice codes match exactly or are reasonably convergent, the student proceeds to the next step. If the codes are very divergent, the student is instructed to see a counselor.

Step 3—The students whose codes are convergent, move to the next step. They look up the occupations they have listed in the *Occupational Outlook Handbook*. The handbook gives them relevant information about the occupations, including a job description, how much training is required, and so forth.

ASSESSMENT PROVISIONS

The SDC manual includes, as appendix B, a series of evaluation strategies for determining the effects of the SDC program on students.

The evaluation activities are grouped into three levels, according to the research sophistication. Level I consists of easily collected indications of popularity of the SDC and satisfaction with it. Level II involves somewhat more difficult-to-collect measures of the quality of assistance offered by the SDC to the students and counselors. Finally, level III suggests research plans for testing constructs of the theory upon which the SDC is based. The three levels are suggested to assist in planning evaluations in accordance with local resources: Personnel time, training, and funds.

TIME REQUIREMENTS

The SDC program requires approximately 2 hours to be completed by a student.

IMPLEMENTATION PROCEDURES

The student materials should be arranged on a table or desk in the order listed in the narrative description. Depending on need, opportunity, and financial resources, one or more layouts could be located in appropriate places (e.g., counseling offices, libraries, student study rooms). A sign should identify the system and invite students to use it.

Summary Cost Information

The SDC consists of printed instruction sheets ($0.05 each, maximum), SDS assessment booklet and occupations finder ($0.65 each, bulk order), SDS checklist sheets ($0.05 each, maximum), and a supply of *Occupational Outlook Handbooks* (only one required—$6.25 each). The system also requires a homemade sign identifying the program for the students. Because the program is self-directed and student-scored, no scoring or computer services are involved. The counselor should have an SDS manual ($3), DOT volume and supplements (most counselors have these). As an example of total estimated costs, providing every student in a 500-member junior class with vocational guidance under the SDC program would cost a total of $359, or about $0.07 a student. This estimate does not include the cost of counselor time, nor does it attempt to compute the savings in counselor time as compared to other guidance systems.

Personnel Required for Product Adoption and Implementation

The SDC program is designed to be managed by one counselor.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

The SDC program includes a student checklist to assure that the student uses the SDS correctly and to refer students who have difficulty to their counselor.

Assurances of Social Fairness

The SDC program does not perpetuate racism, sexism, or other biases. There is no differential treatment of students by race, sex, or other category. Numerous studies of the inventory used in the SDC program have provided an empirical basis for proclaiming the instrument to be sex-fair.

Assurances of Replicability or Transportability

The SDC program has been used in a girls' high school in Baltimore, with the manager of the system being alone in its application. The manager and the students reported the program to be successful. The SDS, used in the SDC program, has been used with over 300,000 students. Approximately 6,000 copies of the SDC manual have been distributed, on request, to counseling personnel.

Claims of Effectiveness

The installation of the SDC program in Seton High School in Baltimore, Maryland, was well-received by the students and helpful to them. Sister Marie Yetter, who managed the program, found that the program helped to provide more guidance to more students.

The effectiveness of the SDS (the inventory used in the SDC program) has been documented through research studies that show that the SDS increases the number of occupations being considered and increases satisfaction and certainty about vocational plans. A recent study found that the SDS provided, by itself, career guidance equally effective to that given by trained counselors. Numerous validity and reliability studies support the effectiveness of the SDS as a career guidance instrument.

Another measure of the SDS' effectiveness is the widespread use of the instrument: In 1973, the SDS was used by approximately 200,000 individuals; in 1974, it was used by approximately 300,000.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student instruction sheets	1 per student	.05	Each time used	Consulting Psychologists Press, 577 College Ave., Palo Alto, Calif. 94306
Self-directed search and occupational finder	1 per student	.60	Each time used	
Student checklist	1 per student	.05	Each time used	
Occupational outlook handbook	1 per program	6.25	Reusable	Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402
SDC manual	1 per counselor	To be announced	Reusable	
SDS manual	1 per counselor	3.00	Reusable	Consulting Psychologists Press, 577 College Ave., Palo Alto, Calif. 94306
Dictionary of Occupational Titles,* I and II plus supplements	1 per counselor	23.90	Reusable	Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402

*Standard counseling office reference.

DEVELOPER/AUTHOR:

Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

John L. Holland, Project Director
Hohn H. Hollinfield
Dean H. Nafziger
Samuel T. Helms

AVAILABILITY

The SDC program is available for use. Photographic copies of the SDC manual are available from the Center for Social Organization of Schools (CSOS); the manual contains the student instructions, student checklist, and directions for ordering other materials. The SDC manual will be revised in early 1976. For information contact:

Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 080 024

CAREER COUNSELING IN COMMUNITY COLLEGES

A product that allows counselors to train themselves to reuse effective career counseling techniques

This product was designed for counselors who help adolescents and young adults in their career development. Thirteen distinct, replicable procedures are presented for helping people make and implement career plans. Covered are such career tasks as choosing, problem solving, building esteem, and managing one's time. The counseling procedures are described in detail so that counselors can apply them in a replicable manner to their own clients. Replication enables one to improve counseling and establish accountability. The author describes one approach for achieving replicability and shows how to employ the 13 procedures so that they can be replicated. Methods of measuring career development and research pertinent to the 13 procedures are also discussed to help the counselor in selecting between procedures and in evaluating the use of these procedures.

The unique aspects of this product are that counselors can train themselves to reuse career-counseling techniques that have been demonstrably effective. This is a breakthrough for counselors who heretofore have had to create new processes for each client because they had no step-by-step procedure for recycling information about successful counseling sessions. The product stimulates the counselor to test new counseling methods and provides some of the tools needed for evaluating their effectiveness.

SUBJECT AREA(S)

The product is comprised of five chapters; the titles and page lengths of these chapters are as follows:

1. Replicable Counseling and Its Implications (9 pages)
2. Counseling Procedures to Aid in Career Choice (26 pages)
3. Counseling Procedures for Resolving Deficits in Vocational Development (28 pages)
4. Overview of Thirteen Replicable Career Counseling Procedures (7 pages)
5. Methods of Evaluating Career Development (14 pages)
6. Appendixes (42 pages)

INTENDED USERS AND BENEFICIARIES

Although designed particularly for use by counselors of 2-year college students, this product is equally appropriate for counselors working with adolescents and young adults in other settings such as secondary schools or noninstitutional youth-oriented agencies.

The beneficiaries are the students who will be helped to make intelligent choices based on knowledge of career requirements in relation to their own strengths.

GOAL(S) OR PURPOSE(S)

The purposes of this product are to help counselors: (1) To broaden their knowledge of effective counseling techniques, (2) to select those procedures that are most appropriate to their circumstances, (3) to replicate those procedures with their own clients, and (4) to evaluate their use of the procedures.

PATTERNS OF USE

This product can be used independently by practicing counselors for their own professional development or can be incorporated into a preservice or inservice counselor-training program.

ASSESSMENT PROVISIONS

No provisions are made for screening users or evaluating the results of using this product.

TIME REQUIREMENTS

No time requirements are suggested in connection with the use of this product.

IMPLEMENTATION PROCEDURES

The product plans are implemented by counselors who train themselves by reading the material. They use the product as a training manual and also have it as a ready reference. The product was developed for use by counselors and no specific materials, equipment, or personnel are required for its use other than those used in typical college-counseling situations.

ASSURANCES AND CLAIMS

The counseling models included in this product were selected specifically for their replicability, and neither the developer nor the publisher has received reports that the models cannot be replicated.

The materials do not appear to display any form of social bias including ethnic or sexual stereotyping (except for occasional use of the generic "he"). This assurance is based on an examination of the product itself.

No evidence is available that would indicate that any of the counseling procedures presented, when used as specified, would result in harm—physically, psychologically, or otherwise—to those counseled.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Junior Colleges
University of California
96 Powell Library Building
Los Angeles, Calif. 90024

Charles C. Healy, Project Director

AVAILABILITY

Career Counseling in Community Colleges was published in 1973 and is currently available from the publisher/distributor for $7.95 (cloth) or $5.95 (paper).

Charles C. Thomas, Publisher
Bannerstone House
301-327 East Lawrence Ave.
Springfield, Ill. 62703

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 025

CAREER GUIDANCE RESOURCE CENTER

A guide for those who wish to implement the research center concept in career education

This monograph has been prepared as a guide for practicing counselors, teachers, and administrators who wish to implement the resource center concept in their local school district or setting. It is also useful as a supplementary source in counselor education courses dealing with the organization and dissemination of career information. The monograph was developed on the belief that the career guidance resource center is the vehicle having the greatest potential for improving significantly the delivery of career information to those persons who need these services.

SUBJECT AREA(S)

Subject areas include major functions of the career resource center; settings in which the career resource center can be used; and how to develop and establish a career resource center, including basic layout considerations, equipment, location, materials, staffing, and procedures for evaluation.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for staff counselors participating in a career education program; directors of career education or career guidance programs; counselor and vocational educators; as well as graduate students preparing in the areas of vocational education, career education, and guidance and counseling.

GOAL(S) OR PURPOSE(S)

The goal of this monograph is to serve as a handbook for the development and design of career resource centers by providing specific information relating to the development of such centers.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

AVAILABILITY

This monograph will be available June 1975 from:
ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 026

THE COMPUTER AND GUIDANCE IN THE UNITED STATES: PAST, PRESENT, AND A POSSIBLE FUTURE

Five available computer guidance systems

Five currently available computer guidance systems are described. The design of a new state-of-the-art computer guidance system is reported. A context is offered for classifying these systems and judging what to expect from each.

SUBJECT AREA(S)

Career guidance, computers in career guidance, and choice and decision processes in career constructionism are the subject areas.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are designers of computer-involved guidance systems in career education and persons considering using an available computer-involved guidance system.

GOAL(S) OR PURPOSE(S)

The purposes of this program are to provide a current statement of the art of computer guidance systems and to specify a context for setting expectations as to outcomes of computer guidance systems.

ASSURANCES AND CLAIMS

Prior to publication, the manuscript was submitted to the Symposium on Computer-Based Counseling, 18th Congress, International Association of Applied Psychology, for critical review and determination of professional competence. This publication has met such standards.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
Northern Illinois University
204 Gabel Hall
De Kalb, Ill. 60115

JoAnn Harris, Coauthor
David V. Tiedeman, Coauthor

AVAILABILITY

Order No. ED 095 372, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 027

LIFE CAREER PLANS: REVIEWING AND RENEWING

A plan for helping adults review and perhaps change career plans

This publication will provide a plan and procedures for helping individuals 18 years and older to review and renew their life career plans and consider, where appropriate, ways and means to implement midlife career switches. There is much discussion and expression of a need for resources in this area, but little, if any, regarding concrete approaches and procedures. This publication would provide counselors and other social professionals with the "know-how" to establish programs and would provide services for the many persons who need and are requesting assistance, but are unable to find people and services that can be helpful to them.

SUBJECT AREA(S)

Attention in this manuscript will be given to several populations: Women, early retirees, veterans, and those contemplating career change at any age. A major share of the publication will be devoted to the concerns and needs of women from several perspectives—those who have never worked but would like to; those who have been out of the labor market for some time but wish to return to work; blue-collar workers who may wish to change their status and upgrade their positions but do not know how; and women, perhaps feeling that their skills are underutilized, who are dissatisfied with their present working situations.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Garry R. Walz, Author
Libby Benjamin, Author

AVAILABILITY

This monograph will be available August 1975 from:
ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INTENDED USERS AND BENEFICIARIES

All social personnel who are working with adolescents and adults are the intended users.

GOAL(S) OR PURPOSE(S)

The goal of this manuscript is to provide practical information and techniques to persons involved with persons contemplating midlife career change.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

RD 080 028

A COMPREHENSIVE VIEW OF CAREER DEVELOPMENT

Actual programs and practices in career guidance that clarify goals and objectives

This monograph is the outcome of a workshop sponsored jointly by the American Personnel and Guidance Association, *Impact Magazine*, and the ERIC/CAPS center. Each paper was originally presented at the conference in Ann Arbor, Michigan, in June 1973, and was subsequently revised by the author, incorporating suggestions received after the presentation.

Each paper speaks to a significant facet of emerging theory and practice in life career development. This monograph is intended to answer many questions regarding the "how" of life career development and to stimulate readers to assess carefully their own philosophy concerning the basic goals and objectives of life career development.

SUBJECT AREA(S)

Subject areas include career development under social and economic change, guidance-based models for career education programs, career guidance and women, guidance and technology, and assessment of career guidance outcomes.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for counselors, counselor educators, directors of counseling programs, teachers, curriculum specialists, administrators, and other professionals involved with career guidance and career education.

GOAL(S) OR PURPOSE(S)

The goals are to acquaint the readers with actual programs and practices in career guidance (and the rationale behind them) to serve as a guide for clarifying goals and objectives and for evaluating outcomes in the development of new programs established by users of the monograph.

MATERIALS AND EQUIPMENT

Copies of this document cost $5 for APGA members and $6 for nonmembers.

ASSURANCES AND CLAIMS

A Comprehensive View of Career Development does not perpetuate sexism, racism, or other biases, e.g., those related to religion, age, or socioeconomic stereotyping.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

AVAILABILITY

This monograph was published and copyrighted in 1974 by the American Personnel and Guidance Association (APGA) and is available from:

American Personnel and Guidance Association
1607 New Hampshire Ave. NW.
Washington, D.C. 20009

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 029

AGE-INCOME GRAPHS BY SEX FOR 336 OCCUPATIONS

A set of graphs which forces students to consider income over the lifespan rather than just the entering salary

When considering their future occupations, students generally assume that the longer they work, the more they will earn. In addition to assuming a direct, upward relationship for all occupations, they also focus on the entry income when considering different occupations. All considerations of income are really abstract thoughts, and a few cents-an-hour variation between jobs can be magnified out of proportion to the real difference.

This booklet presents graphs of the relations between age and average yearly income for each sex for 336 occupations. These curves are based on data taken from the 1970 Census of the United States. The incomes are for 1969, the last full year before the census was taken.

Students using these visual income curves for the first time are forced to consider income over the lifespan. The assumption that income increases in all jobs with years of experience is quickly refuted. Comparisons are readily made between incomes in various jobs over the lifespan and between incomes of males and females in the same occupations.

When there are fewer than 25 people in a particular age group (based on a 6-in-100 random sample of the 1970 census), no data were reported. When 5 or more consecutive age groups had fewer than 25 persons, the whole curve was dropped. These gaps and missing curves should serve to make students aware of occupations which have been "closed" to members of a particular sex and also cause students to question the relative absence of particular age groups in certain occupations.

These are only a few of the purposes for which these income curves can be used. Counselors and teachers should find that these materials will provide students an excellent stimulus for exploring the income dimension of occupations.

SUBJECT AREA(S)

Guidance and counseling are the subject areas.

INTENDED USERS AND BENEFICIARIES

Teachers, students, and counselors considering income factors in occupational choice are the intended users.

GOAL(S) OR PURPOSE(S)

The goal is to increase rationality of occupational choice to the extent that choice is based on income factors.

PATTERNS OF USE

The document is intended as a reference and sourcebook for counselors. Graphs are organized into 336 separate pages indexed by occupational category, alphabet, and selected occupational titles; they can be used at all levels of education focusing on jobs and careers.

ASSESSMENT PROVISIONS

The document contains appropriate precautionary instructions for interpretation.

TIME REQUIREMENTS

There is no specified time requirement.

IMPLEMENTATION PROCEDURES

The document may be reproduced and circulated. Duplication can be done by photo-offset or an office copier.

Each counselor should have one copy of *Age-Income Graphs by Sex for 336 Occupations*.

ASSURANCES AND CLAIMS

The income data used in the preparation of these graphs came from 1969. As such, it may not represent the true picture of 1975 earnings, which have risen due to inflation. Inflation will affect only the elevation of the graph to reflect greater earnings in all jobs across the board. Inflation should not change the slope of the graphs; for instance, it should not lead to differential increases in salary either as a function of occupation or age. The user is cautioned that an occupation which paid $10,000 in 1969 is probably paying at least $12,000 today, and the graphs must be interpreted with the caution that while the salaries are lower than those today, the 1969-based differences between occupations, sex, and increase in income with experience remain valid.

Other precautions for the user are:

1. These census data are for people of different ages, not for the same person at different times in the individual's life.

2. The income of workers in a given job changes from year to year. These graphs are for 1 year only.

3. In a given occupation, wages differ to some extent from place to place. These graphs give the average for the whole country. It should be noted, however, that when wages differ by place generally, so does the cost of living. Thus the graphs probably provide a good relative indication of the purchasing power of income regardless of location.

4. The shape of the curve and the relative differences in income between occupations probably will not change much over the next 20 or 30 years.

5. These curves tell what kinds of variations exist between average yearly incomes of different occupations according to the age and sex (not race) of the people in each occupation.

6. The large income differences between men and women partly stem from the fact that women often hold part-time or temporary jobs.

7. The numbers on the graphs are the same as those used by the 1970 U.S. Census. Not all census occupations were included in the document, and the census did not use all the numbers from 0001 to 1000; many numbers are skipped in the document (number listed: 336).

Technically the data were taken from the six 1-in-100 samples of the U.S. Census. Parts of the curves were edited when there were fewer than 25 cases in an age-sex category of an occupation. Whole curves (of men or women or both) were left out when (1) there were fewer than five contiguous age categories of at least 25 cases per category or (2) when the occupational title given by the census would not be meaningful to users. (Most of these were residual categories.) The objective of the deletions was to provide only those graphs which would be easy to understand.

DEVELOPER/AUTHOR:

University of Wisconsin
Madison, Wis. 53706

Archibald O. Haller
Phillip A. Perrons
Stephen J. Miller

AVAILABILITY

Although the graphs are not currently available for distribution a publisher is being sought.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 080 030

THE CAREER DATA BOOK (INCLUDING "STUDENT'S BOOKLET")

A resource book which provides detailed information about career plans of persons 5 years out of high school

The Career Data Book is a 400-page resource book for counselors that provides detailed descriptions of the interests, acquired information, abilities, and background characteristics of 108,000 high school students who, five years after high school, planned careers in any of 138 different occupations. The book contains two introductory chapters describing how the data are presented and how to use the book. Twelve additional chapters, one on each of 12 career groups, present information on specific occupations and on the interests, acquired information, abilities, and background characteristics of individuals who later pursued those careers. Profiles of the typical characteristics of individuals pursuing each of the 138 careers are also included. Five appendices provide information on how to generate and interpret profiles for students who are now in high school.

A 16-page *Student's Booklet* provides instructions and information to assist students in using *The Career Data Book*. In addition, it contains summary information on each of the 12 career groups.

The Career Data Book is based on data obtained in the Project TALENT Five-Year Follow-Up Studies. Unlike other career information sources, which typically present only information about occupations and necessary or useful skills for persons in those occupations, *The Career Data Book* tells what individuals, who eventually pursued specific careers, were like when they were in high school. By presenting information which students can directly relate to their own characteristics, *The Career Data Book* provides a unique resource for students to use in examining and exploring career options.

The Career Data Book is intended primarily for use by school guidance personnel, though it also has value for employment counselors in other institutions. There are four main steps suggested for using *The Career Data Book* as a tool for practical vocational guidance: (1) Obtain a profile of the student's characteristics, (2) determine a set of occupations to investigate, (3) determine how well the student's profile matches the profiles for the selected occupations, and (4) advise the student on steps to take in exploring a career (or careers) in depth.

SUBJECT AREA(S)

Vocational guidance: Career awareness and exploration, individual self-assessment, and decisionmaking.

INTENDED USERS AND BENEFICIARIES

Although intended primarily for use by high school guidance counselors and students (especially noncollege bound students), *The Career Data Book* also has value for guidance personnel in other institutions, such as State employment offices, prisons, and large industries. The data book itself is used primarily by counselors, or by students with the counselor's assistance. The technical nature of the information (interpretation of test results and profiles) makes the book difficult for students with low math or reading skills to use directly.

The *Student's Booklet* is developed for use by students.

GOAL(S) OR PURPOSE(S)

The purpose of *The Career Data Book* is to improve practical career guidance for high school students, particularly for noncollege bound high school students, by providing relevant data for individuals to consider in their career planning and decisionmaking. There are no specific program objectives, as the book is intended as a resource document.

PATTERNS OF USE

The Career Data Book is essentially a resource book, intended for use in career counseling. The pattern and extent of its use will be a function of the nature and extent of the counseling and/or student interest. In addition to use in counseling, it can also be used as a supplement to academic instruction (e.g., mathematics) in programs attempting to integrate career education with traditional curriculums.

The book reflects a compromise between a "cookbook" approach to profile development and interpretation and a "basic resource" approach: It gives some guidelines for using and interpreting the profiles, but is also gives alternative suggestions for those interested in more, or less, sophisticated analyses. Thus, *The Career Data Book* provides for considerable flexibility in its use.

IMPLEMENTATION PROCEDURES

The Career Data Book requires that students have data on their own interests, information levels, abilities, and general background. Students' scores on current commonly-used tests can be converted to the TALENT-equivalents necessary for comparison with the data book profiles, using a table included in the data book.

Using its own funds and in collaboration with the staff of CTB/McGraw-Hill, AIR has also developed the Planning Career Goals Program. This program, scheduled for commercial distribution by CTB/McGraw-Hill in the fall of 1975, includes TALENT-equated tests, the results of which can be compared directly to the data book profiles. Moreover, the program provides for the student a profile of interests, abilities, and the like. This is the most recent in a series of programs developed by various groups, including AIR, to enable individuals to compare their own characteristics to TALENT findings; others include the PLAN guidance program, the Inter-American Test Battery, and various military service qualifying tests.

Personnel Required for Product Adoption and Implementation

Counselors using *The Career Data Book* should be skilled in interpreting test results and reading profiles. Counselors typically work with students on a one-to-one basis in using *The Career Data Book*. It is estimated that one counselor could effectively counsel between 100-200 students in a year, depending on other responsibilities.

ASSURANCES AND CLAIMS

Assurances

The majority of counselors participating in two workshops on how to use *The Career Data Book* felt that the book would not be harmful to students. (Those feeling that "some" harm might be done commented that the book was confusing and required explanation; the risk of harm seemed to be associated with students trying to use and understand the data without counselor assistance.)

The profiles in *The Career Data Book* present the typical characteristics of males or females who eventually pursued specific occupations: profiles for careers pursued predominantly by females are based on females' test scores, and profiles for careers pursued predominantly by males are based on males' scores. However, to insure that students of both sexes are able to use all the profiles, a table for determining the equivalents of the two scores has been included in the book. This is to correct any bias inherent in the data.

Use of the data book has not been monitored. However, the considerable volume of sales in the first year (over 6,000 copies) suggests that schools are finding it sufficiently transportable.

Claims

The majority of counselors participating in workshops on *The Career Data Book* said that: (1) The book was helpful for one-to-one counseling, and (2) the book was useful in a career education classroom setting.

In addition, numerous comments have been received from reviewers and users testifying to *The Career Data Book's* usefulness.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student's booklet	1 per student	.12	Consumable	
Career Data Book	1 per counselor	5.50	Reusable	
TALENT-equated tests (from Planning Career Goals program) (Optional)	1 set per student	*	Reusable	CTB/McGraw-Hill
Compuscan-copyrighted answer sheet (from Planning Career Goals program) (Optional)	1 per student	*	Consumable	CTB/McGraw-Hill

*Product is scheduled for publication in the fall of 1975; item costs have not been determined.

DEVELOPER/AUTHOR:

American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

John C. Flanagan, Principal Investigator

AVAILABILITY

The Career Data Book **and** ***Student's Booklet*** **were published in 1973. Copyright is claimed by the American Institutes for Research in the Behavioral Sciences until 1978; thereafter, all portions of the book will be public domain. This book is available from:**

American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 031

USING THE TALENT PROFILES IN COUNSELING: A SUPPLEMENT TO PROJECT TALENT'S CAREER DATA BOOK

Suggestions for the use of TALENT profiles in counseling

This supplement to *The Career Book* offers the guidance counselor both a set of occupation profiles based on TALENT 11th- and 12th-grade followup data, and a number of suggestions for use of these profiles in counseling. It consists of 4 parts: (1) An introduction to Project TALENT, (2) a presentation of 3 hypothetical case studies depicting various ways the profiles can be used in counseling, (3) over 100 TALENT profiles, and (4) a list and accompanying description of all TALENT publications of relevance to guidance counselors.

This supplement to *The Career Data Book* is especially designed for those counselors and researchers who have a copy of *The Career Data Book* and wish to use profiles with a greater validity in their work. Especially significant is the inclusion on each profile of information on job satisfaction and salary reported by those TALENT participants who are in the particular occupation. The combination of these current data with those collected in 1960 provides counselors and researchers with a very complete approach to career exploration, development, and research. The three hypothetical case studies draw on this material in various ways to highlight many of the ways these profiles may be used in counseling. Special emphasis is given in these hypothetical counselor-student conversations to clarifying occupational alternatives and exploring careers in general.

As is true with *The General Data Book*, students working with this supplement will need to work with the counselor to complete a personal profile, explore and consider various occupations and career groups, and explore in depth career areas of special interest.

SUBJECT AREA(S)

Vocational guidance, career awareness and exploration, individual self-assessment, and decisionmaking are the subject areas.

INTENDED USERS AND BENEFICIARIES

Like *The Career Data Book*, the supplement is intended primarily for use by high school guidance counselors and students (especially non-college-bound students); it can also be used by guidance personnel in other institutions, such as State employment offices, prisons, and large industries. The supplement is used primarily by counselors, or by students with the counselor's assistance.

GOAL(S) OR PURPOSE(S)

The purposes of the supplement to *The Career Data Book* are to improve practical career guidance for high school students, particularly for non-college-bound high school students, by providing relevant data for individuals to consider in their career planning and decisionmaking and to assist students in learning about various occupations—what they can offer as well as what high school skills they seem to require.

PATTERNS OF USE

The supplement to *The Career Data Book* is essentially a resource to be used in career counseling. The pattern and extent of its use will be a function of the nature and extent of the counseling and/or student interest. In addition to use in counseling, it can also be used as a supplement to academic instruction (e.g., mathematics) in programs attempting to integrate career education with traditional curriculums.

The supplement to *The Career Data Book* emphasizes the variety of ways in which the TALENT profiles may be used. Thus, it provides counselors with considerable flexibility in using the supplement to increase career awareness and exploration.

IMPLEMENTATION PROCEDURES

The supplement to *The Career Data Book* requires that students have data on their own interests, information levels, abilities, and general background. Students' scores on current commonly used tests can be converted to the TALENT-equivalents necessary for comparison with the data-book profiles, using a table included in the data book. The supplement does demonstrate, however, that the use of student self-estimates in building profiles may be a very good method—it increases and checks for student self-awareness. The supplement also shows how self-estimates and test data can be integrated.

Using its own funds and in collaboration with the staff of CTB/McGraw-Hill, American Institutes for Research (AIR) has developed the Planning Career Goals program. This program, scheduled for commercial distribution by CTB/McGraw-Hill in fall 1975, includes TALENT-equated tests, the results of which can be compared directly to the data-book profiles. Moreover, the program provides for the student a profile of interests and abilities.

Personnel Required for Product Adoption and Implementation

Counselors using the supplement to *The Career Data Book* should be skilled in assisting students to clarify their own occupational goals, interpreting test results, and reading profiles. Counselors typically work with students on a 1-to-1 basis in using the supplement.

ASSURANCES AND CLAIMS

The supplement is "safe" to use. Counseling experts have reported that they found it very useful. The presentation is clear and very straightforward. Each profile is drawn on both sexes, combined to eliminate any possible (apparent) sex bias. The scale on socioeconomic status which was presented in *The Career Data Book* is omitted from the supplement in order to reduce the chance of any negative predictions—"Poor people can't become doctors"—being made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Supplement	1 per counselor	*	Reusable	
Career Data Book	1 per counselor	5.50	Reusable	
TALENT-equated tests (from Planning Career Goals program)(optional)	1 set per student	*	Reusable	CTB/McGraw-Hill
Compuscan, copyrighted answer sheet (from Planning Career Goals program) (optional)	1 per student	*	Consumable by student	CTB/McGraw-Hill

* Product is scheduled for publication in fall 1975; item costs have not yet been determined.

DEVELOPER/AUTHOR:

American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

John C. Flanagan, Principal Investigator

AVAILABILITY

The supplement to *The Career Data Book* will be published in April 1975. It will be available from:
American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 080 032

SOURCES OF INFLUENCE ON CAREER DECISIONMAKING AND THEIR IMPACT ON CAREER ATTAINMENT: A HANDBOOK FOR COUNSELORS AND EDUCATORS (A PRODUCT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)

A state-of-the-art (career decisionmaking) review

The handbook on sources of influence on career decisionmaking will provide a state-of-the-art review and synthesis of the role of "significant others" (influencers of individuals' career decisions). Since this handbook will center on empirical findings from research, the limitations of research and the utility of the information will be documented.

Such information is intended to stimulate counselors and educators to consider alternative means of delivering career guidance. Although much research has been accomplished documenting the role of "significant others," this information has not yet been made available in a single comprehensive document. This handbook fulfills that need.

As an information resource, the handbook will not prescribe specific guidance strategies. It will provide information which may guide the development of alternative strategies by individual schools. Another function of the handbook is to sensitize counselors and educators to the fact that the individual makes career decisions with a "sphere of influence" from individuals within the community and to identify for practitioners who those individuals tend to be.

SUBJECT AREA(S)

Careers and counseling

This product is not curricular. Its topic areas include: (1) Who influences the career decisions of youth and how; (2) the degree to which influencers differ by ethnicity and sex; (3) the limitations of knowledge about the influence process; and (4) the confidence with which counselors, administrators, and other educators may use this information in developing guidance programs.

INTENDED USERS AND BENEFICIARIES

Counselors, educational administrators, and other educators are the intended users.

GOAL(S) OR PURPOSE(S)

The goals of this product are to provide counselors and educators with state-of-the-art information about the influencers of young people's career decisions and how their influence operates and to enable more effective planning and execution of career guidance programs within individual schools.

PATTERNS OF USE

The handbook is to be used as a resource in planning and carrying out career guidance programs.

ASSESSMENT PROVISIONS

No formal testing is developed with this handbook. If a school uses this information to implement a guidance program as part of the career planning support system, it would be evaluated through the procedures prescribed as part of the career planning support system procedure.

IMPLEMENTATION PROCEDURES

As a resource handbook, there are no specific procedures for implementation. This would be contingent on the type of program (if any) an individual school might choose to develop.

The handbook is the only material or equipment associated with the product. When a school purchases the career planning support system, it is included as part of the package. The handbook can also be used by itself. In single copies, the cost of the handbook may range between $3 and $4. The product is reusable and should require a time investment of 2 to 3 hours for comprehension.

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Campbell, Program Director
Evans W. Curry, Work Unit Director

AVAILABILITY

Development is not yet sufficiently accomplished to project an accurate date of availability.

INFORMATION CURRENT AS OF MARCH 1975 ■

EXPERIENCE-BASED CAREER EDUCATION (EBCE)

An inschool and out-of-school secondary school program focused on career development and guidance

Experience-Based Career Education is a secondary school program that combines in school and out-of-school facilities and personnel in an educational program focused on careers. Its purposes are: (1) To help students develop a rational, reality-tested career plan; (2) to develop and utilize self-definition, self-appraisal, decisionmaking, information processing, and responsibility skills; and (3) to promote measurable academic growth in communications skills and mathematics through purposeful, self-directed activity. The content covers all of the traditional areas associated with secondary schools, subject to the availability, willingness, and ability of employer and community participants. Career areas included in the program are determined by student interests and the employer/community resource pool.

The students participate in a core instructional program that has three major subdivisions: Career Development, Career Guidance, and Academic Resource Center. Career Development provides each student with firsthand experience in actual work settings. Students spend 1 to 2 days per week working at commercial, industrial, or service agency sites. They can choose from approximately 20 clusters of employer sites for exploration. The clusters include areas such as animal resources, construction, finance, social service, and transportation. Once students have made tentative career choices, they carry out an indepth investigation of a single job or site. This may last from a few weeks to many months. All activities which take place at employer/community sites are taught by practicing experts in the area being studied.

Career guidance consists of small-group sessions and individual counseling. The student's experiences at employer sites are used as a resource to promote self-exploration, values clarification, life skills, motivation to learn, career planning, and integration of program activities.

The Academic Resource Center, the third component, is designed to meet the individual academic needs of students in communications skills and mathematics. Individualized learning for adults is the primary instructional program used.

For the remainder of their high school program, students attend regular classes.

SUBJECT AREA(S)

Career Education

The program is focused on three general areas: Career development, career guidance, and basic skills instruction.

INTENDED USERS AND BENEFICIARIES

Experience-Based Career Education (EBCE) is for students in grades 9 through 12. There are no restrictions on academic interests or achievement.

GOAL(S) OR PURPOSE(S)

EBCE is part of a total high school program that concentrates on the following student learning objectives: (1) To facilitate the emergence within each student of a rational, reality-tested career plan intended to guide and shape career decisions and future behavior through a series of structured activities at employer/community sites; (2) to provide students with means for acquiring general knowledge and skills to improve their interaction with the economic sector; (3) to provide students with means to acquire focused, reality-based experiences to test emerging life interests and pursue evolving lifestyles; (4) to develop and utilize self-definition, self-appraisal, decisionmaking, information processing, and responsibility skills; and (5) to promote measurable academic growth in communication skills and mathematics through purposeful, self-directed activity.

PATTERNS OF USE

A team of resource coordinators implement the career development aspects of the program. This team is responsible for recruiting employer/community participants, constructing instructional programs, monitoring, and assisting in the revision of site programs. A team of counselors delivers guidance services to the students. The counselor and resource coordinator roles may be combined. A team of mathematics and English instructors, assisted by clerical aides, implement the academic resource center by providing individualized instructional systems in their content areas. The academic resource center employs programed sequencing and self-pacing.

The learner assumes a variety of roles in the program. Among them are discoverer, observer, evaluator, creator of self-structure, problem solver, reader, and writer. In studying career areas, the student generally begins with exploration activities and moves toward more specialized investigations of career areas of particular interest.

ASSESSMENT PROVISIONS

Built into each program component are assessment and recordkeeping provisions to help evaluate student needs, progress, and attainment of objectives. In addition, an evaluation package is available to assess student group results. Included in the package are instruments to assess career knowledge, interests, and attitudes; student attitudes toward self, others, and learning environments; and basic academic skills.

TIME REQUIREMENTS

EBCE can be applied to all 4 years of secondary school education. The time any one student spends in the program depends on individual interests and abilities. A minimum of 1 year is suggested. Involvement in all three program components requires approximately 15 hours per week.

IMPLEMENTATION PROCEDURES

EBCE is not sufficiently developed so that it can be used outside of its development site without technical assistance and training from the developer. These are both available on a cost-reimbursement basis. Most secondary schools will need to make major changes in scheduling, organization of personnel, and management systems if they are to fit into the existing components of the program. However, the program's flexibility does allow changes to be made in the individual components so that they can better fit local needs and constraints. A community may react negatively to having students out of the school building for learning experiences. This can be alleviated by communicating the planned and meaningful nature of the program. Also, the program could be perceived as being only for slow, noncollege-bound students. This is not the case, and its success with college-bound students should be pointed out. Crucial to the implementation of EBCE is the willing cooperation of employer/community resources. Their availability should be carefully ascertained before implementing the program.

All staffing patterns indicated are based on a student enrollment of 300 participating for three-fourths of their secondary education credits during a given year.

A total of 14 professional staff assisted by 3 support staff is necessary to implement the program. The professional staff includes one manager, eight counselors and resource coordinators, and five English and mathematics instructors. Support staff include clerical aides and one secretary. Staff costs are estimated at $237,000.

Training and technical assistance will be necessary for the adoption of the product. About 60 days of training and technical assistance are anticipated. At $250/day this amounts to $15,000.

Student and staff travel is estimated at $13,000. Telephone costs are estimated to be $3,900. Printing and reproduction necessary for product implementation is $4,000. Conference expenses for employer/community participants will be about $2,000.

One time costs for cassette tape players, filmstrip viewers, and storage cabinets for audiovisual materials are $1,095.

Cost per student, per year, is $1,046.65.

ASSURANCES AND CLAIMS

Assurances

Materials have been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Selection procedures have been established to assure equal opportunity for use of the product by all applicants. Use of the product has not resulted in any observed harmful effects.

The product is transportable with technical assistance. The product is currently in a dissemination phase to test issues regarding replicability.

Claims

The following claims are asserted as program effects: (1) Students acquire increased mastery in basic academic skills, (2) students develop increased mastery of career awareness and knowledge, (3) students develop enhanced attitudes toward learning environments, (4) students evidence positive attitudes toward the program resources, and (5) parents of students evidence positive attitudes toward the program.

Evidence of the effectiveness of the product is provided by the results of an internal summative evaluation conducted during fiscal year 1974 under the supervision of the National Institute of Education. Two groups of students were utilized to test the effectiveness of the product. The experimental (E) group consisted of 76 10th- and 11th-grade students who participated in the program. A nonequivalent control (C) group of 81 students randomly selected from the same high school as the E group constituted the second group.

Both standardized and program-developed instruments were used in the evaluation. The following instruments were administered to E- and C-group students on a pretest and posttest basis: The Comprehensive Tests of Basic Skills (CTBS), the Career Maturity Inventory (CMI), and the Assessment of Student Attitudes (ASA) survey. The first two are available commercially and the third was prepared by Research for Better Schools, Inc. Two other sources of information were used to generate data on the effectiveness of the product: The Student Opinion Survey (SOS) and the Parent Opinion Survey (POS). Analysis of the results supports each of the claims asserted for RBS EBCE. Further documentation of these claims is contained in papers presented at the annual meetings of the American Vocational Association and the American Educational Research Association.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
ILA mathematics	1	50.00	Yearly	
ILA communication skills	1	50.00	Yearly	
ILA training manual	1 per teacher	4.00	Reusable	
Cassette tape players with earphones	15	50.00	Reusable	
Film strip viewers	10	24.50	Reusable	
Storage cabinets for audiovisual materials	2	75.00	Reusable	
Guidance training manual	1 per counselor	4.00	Reusable	
Guidance materials	1	3.50	Yearly	
Career development training manual	1 per coordinator	4.50	Reusable	
Career development materials	1 per student	1.50	Yearly	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Louis M. Maguire, Program Director

AVAILABILITY

All materials and training and technical services will be available from the developer by September 1, 1975. Costs have yet to be established. The availability of training and technical assistance will be limited to a small number of adopters; materials will be widely distributed. For further information contact:

Research for Better Schools, Inc.
1700 Market St., Suite 1700
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 002

EXPERIENCE-BASED CAREER EDUCATION (EBCE)

An alternative education program that provides comprehensive learning opportunities in the community for 16- to 18-year-olds

Experience-Based Career Education (EBCE) is an alternative secondary education program that provides comprehensive learning opportunities for young people ages 16-18, using the community as the classroom. Little tie to the traditional high school is required. While career interests of students are used for planning learning experiences, the curriculum gives equal attention to basic skills, life skills, and career development. Students successfully completing EBCE graduation requirements receive a standard high school diploma awarded by the host school district. Professionally certified personnel who are responsible for the program wear titles such as "learning manager" and "employer relations specialist." Employer instructors recruited on the basis of student career interests are equal partners in the EBCE enterprise. They range from attorneys and automotive mechanics to yardmasters and zoologists. They are people who are interested in sharing time with inquisitive adolescents. These resource people make their shops and offices available for periods ranging from 3 days to 3 months, demonstrating the strong alliance that is possible between education and work.

EBCE provides an operational test of the following assumptions:

That students can acquire useful knowledge and skills through direct involvement in personally relevant off-campus learning situations;

That the school classroom can be viewed as just another community resource rather than the primary locus for learning;

That students will test a number of career options before locking themselves in too early on a particular job and training sequence;

That the community will make valuable contributions in program policymaking if given wide-ranging authority;

That resource persons holding positions of responsibility in the working world will provide career-related expertise which cannot be duplicated by the schools;

That learning is a process that can be managed, suggesting new roles for staff;

That learning can be integrated in problem-centered projects more effectively than when subject areas are studied separately;

That students can be measured on what they can do (perform) rather than solely on what they know.

SUBJECT AREA(S)

No formal "subjects" are studied in EBCE for their own sake, unless the student chooses to enroll in coursework in a formal educational institution because it relates to a negotiated learning plan. EBCE "instructional" outcomes are clustered into basic skills, life skills, and career development; equally important effects of EBCE that are more difficult to measure are called "other outcomes."

INTENDED USERS AND BENEFICIARIES

The EBCE program is intended for secondary-aged students of both sexes who are at any ability and achievement level and prefer an alternative learning style. Another beneficiary of the program is a new alliance between education and work, whereby the community plays a greater role in the transition of youth to adulthood.

The handbooks and other products generated by the EBCE program are targeted for potential adopters and trainers who, with technical assistance, can modify the EBCE program to fit local needs: Local education agency EBCE staff, State department of education personnel, higher education teacher training personnel, business and labor leaders interested in EBCE installation, and the like.

GOAL(S) OR PURPOSE(S)

EBCE program outcomes are grouped into three categories.

Life skills goals are to help students: (1) To increase their ability to gather, analyze, and interpret information; (2) to increase their ability to recognize and apply scientific procedures and methods to be able to analyze the impact of technology on natural environments and cultural values; (3) to accept the responsibility for the effect that their behaviors and attitudes have on themselves and other people; (4) to increase their ability to understand democratic processes; and (5) to demonstrate survival skills that cover the economic, planning, legal-political, health-safety, property maintenance, recreational, and occupational aspects of living.

Basic skills goals are to help students: (1) To be able to perform applied skill tasks related to careers of interest to them; (2) to improve their performance level of the basic skills (reading, writing, oral communication, and mathematics); (3) to become aware of the level of basic skills needed to enter careers of interest to them; and (4) to demonstrate an increased willingness to apply basic skills to work tasks and to a vocational interest.

Career development goals are to help students to increase their knowledge of their own aptitudes, interests, and abilities; and to develop the general skills of job finding, job application, on-the-job negotiation, and dependability necessary in daily work interactions.

PATTERNS OF USE

Patterns of use for EBCE vary considerably and are presently under test in 11 Pacific Northwest school districts. Some communities may prefer to adapt the entire EBCE model (for example, as a physically separate alternative school governed by a private, nonprofit corporation or school district, or as a school within a school) while others are using certain key elements—such as the career exploration process—in existing schools and off-campus alternative programs.

ASSESSMENT PROVISIONS

Students volunteering for the program were randomly assigned to participate in a control group. Extensive pretesting and posttesting, using a true experimental design, were conducted in the areas of basic skills, life skills, and career development. Student progress is monitored continually by the project staff and employer instructors. In addition to an independent external evaluation by Educational Testing Service, a NWREL evaluation unit performed extensive evaluation. Frequent staff and student self-assessments are also conducted.

TIME REQUIREMENTS

EBCE is an alternative to the regular school year program. Individual student scheduling is negotiable to accommodate to the hours and expectations of cooperating employer instructors.

IMPLEMENTATION PROCEDURES

Special Equipment and Facilities

EBCE requires a learning center with facilities for quiet student study, group activities, and one-to-one staff/student conferences. Learning resources recommended include audiovisual aides, inexpensive cameras, reference materials, and programed learning materials. EBCE staff encourages students to make use of available learning resources in the community as much as possible. All student learning activities on employer sites require "hands-on" familiarity with reading materials and equipment normally used in that occupation or business. A system for transporting students to and from learning sites in the community is necessary.

Special Services

Training in EBCE procedures for students, staff, and cooperating employer resource persons is essential. Guidelines for such training are provided in NWREL's EBCE products.

Organizational Requirements

EBCE represents a total restructuring of the traditional school program in: Management and organization, curriculum and instruction, use of the community resources, and student services. Brief implications for each restructuring follow:

Management and organization.—A separate governing body or advisory board is recommended to set policies for EBCE; community relations is extremely important and requires ongoing attention. Personnel must be flexible and creative—general educators are preferred subject matter specialists. Business management requires particular attention to insurance, transportation, and so forth.

Curriculum and instruction.—The EBCE curriculum and instruction program hinges on individual student responsibility for using the following strategies to the greatest extent possible: Projects, explorations, competency completions, employer seminars, journals, group activities, programed and other resources, tutors, optional on-campus classes, and full utilization of employer sites for educational purposes. Support provided by the program includes an accountability system that helps students negotiate activities and plan their time.

Use of community resources.—Cooperating volunteers from the community must be recruited and prepared systematically for EBCE responsibilities. An analysis of the learning potential of participating employer sites is critical for successful student learning.

Student services—Student guidance is not a separate function in EBCE, but is an expected role for every adult coming in contact with students. An important support function in EBCE is a recordkeeping system that serves students and staff alike. A portfolio of student accomplishments is designed to replace or supplement the traditional high school transcript as a record of student achievement.

ASSURANCES AND CLAIMS

The EBCE program has benefited from rigorous internal summative and formative evaluation during the 3 operational years that the parent design and test site have been serving students. In addition, a number of outside reviews have been held. For instance, during school year 1973-74, a blue ribbon panel composed of Keith Goldhammer, Dean, College of Education, Michigan State University; Charles Bowen, Director of Educational Development for IBM; Claude Brown, Research and Evaluation Director, Teamster's Local 688; Glenys Unruh, President, Association for Supervision and Curriculum Development; and Richard Graham, Director, Center for

Moral Education, visited the EBCE program and issued a report on their findings. During school year 1974-75, an external evaluation is being conducted by Educational Testing Service. The U.S. Office of Education/National Institute of Education Dissemination Review Board has examined fiscal year 1974 evaluation results as well.

In addition to the ongoing evaluation, the EBCE program meets Oregon State graduation requirements with the expectation that the same will hold true in other States. EBCE students are awarded a regular high school diploma on completion of program requirements. Graduates have been able to enter postsecondary programs and/or employment with no difficulty.

EBCE is open to all students. When more students apply than can be accommodated, a random selection procedure is recommended. At the parent site in Oregon, an equal number of boys and girls have participated—representing the full range of socioeconomic, racial, and achievement and ability levels of their peers at the cooperating high school. All participating employer sites are open to all students, with several girls exploring automobile mechanics and several boys trying out telephone operating, for instance.

EBCE is presently being implemented in one other school district in Oregon. Other "whole model" EBCE programs are on the drawing board in Alaska, Oregon, and Washington. Additional sites are experimenting with particular EBCE procedures. The EBCE cooperating replication site is receiving technical assistance from the developer.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
User handbooks: (for general reference)				
Management and organization	Not determined	Not determined	Not determined	
Curriculum and instruction	Not determined	Not determined	Not determined	
Employer/community resources	Not determined	Not determined	Not determined	
Student services	Not determined	Not determined	Not determined	
General information materials:				
Program overview packet	Not determined	Not determined	Not determined	
Slidetape presentations	Not determined	Not determined	Not determined	
Consumable materials:				
Student handbook	Not determined	Not determined	Not determined	
Learning site analysis form	Not determined	Not determined	Not determined	
Record of student performance	Not determined	Not determined	Not determined	
Exploration package	Not determined	Not determined	Not determined	

DEVELOPER/AUTHOR:

**Northwest Regional Educational Laboratory
Lindsay Building
710 SW. Second Ave.
Portland, Oreg. 97204**

Rex Hagans, Program Director

AVAILABILITY

Materials are now being revised based on continued testing at the parent site in Oregon, and second-generation field tests are now beginning elsewhere. Work with publishers is not planned until fiscal year 1977-78.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 003

EXPERIENCE-BASED CAREER EDUCATION (EBCE AEL VERSION)

A comprehensive alternative to traditional secondary school programs allowing students to earn credits through community experiences

This is a comprehensive, self-contained alternative to traditional classroom and job preparation programs for high school students (grades 11 and 12) who volunteer to earn all of their required and elective credits for a given year (or semester) through direct community experiences. Students spend about 75 percent of their time in the community, under the tutelage of a series of adults who are performing their normal career and avocational activities. Neither students nor adults are paid.

Individual students spend an average of 4 weeks (4 days per week) on each community site pursuing specific academic and career objectives. For example, a student who is exploring the "real world" dimensions of an ecology career might simultaneously be conducting water purification experiments (chemistry), performing statistical analysis (mathematics), writing reports (English), or investigating political aspects of water pollution legislation (social studies).

Students relate to a single Learning Coordinator (LC) for all aspects of their programs; there are no large-group sessions, classes, or "content teachers." The basic "grist" for program decisionmaking is detailed information of the specific learning potential at each site, a structure of 120 concepts and 600 related objectives, a cross-referencing system tying objectives to resources (community and supplemental), and measured and self-addressed data about each student's unique needs and characteristics.

The student and LC jointly determine the general learning goals for the year and specific objectives for each 6- to 12-week period, and then translate them into detailed site activities (what the student will do; how, when, with which adults; the products and assessment criteria; the supplemental materials; and how credit will be assigned). Once a week, the student and LC assess the outcomes and make decisions about the next objectives, activities, and sites.

The emphasis throughout the program is on: Learning through direct experience; carefully planning, monitoring, and assessing projects; giving students responsibility for program decisions and achievement; integrating major disciplines; and personalizing objectives and activities to meet the unique needs of each student.

SUBJECT AREA(S)

Most high school academic subjects (mathematics, English/communications, social studies, and science); career-related subjects (exploration, planning, and decisionmaking); and personal development/guidance are mastered through community experiences, with some supplemental resources. No specific subject text materials are developed. However, existing materials are integrated into a student's program in an innovative and unique way.

INTENDED USERS AND BENEFICIARIES

Users can be any school system desiring to offer students a viable, valuable alternative to the traditional classroom approach. Student beneficiaries are those in grades 11 and 12 who volunteer to earn all of their required/chosen credits for a given year or semester through direct community experiences. The program appears appropriate for a wide spectrum of students in relation to academic standing, reading level, interests, sex, race, and socioeconomic status.

Staff beneficiaries are those instructional, administrative, and guidance personnel who benefit from a broader, more personalized (one-to-one), and experiential-based approach to the education of youth. For example, instead of imparting content, LC's guide the students in obtaining insights from community adults and academic and career information; evaluating what is learned in terms of self-growth; and planning and implementing each activity.

Community beneficiaries are those adults interested in direct involvement in the education of youth. Parents who value deeper career and personal preparation of their children for adult functioning will benefit from this program.

GOAL(S) OR PURPOSE(S)

The major purposes are: (1) To bridge gaps between high school education and adult community life (especially employment); (2) to provide activities which simultaneously achieve academic, career, and personal objectives; (3) to provide such activities experientially, through direct adult-student interactions, on a planned, monitored, and evaluated basis; (4) to provide students with equal responsibility and authority (with staff) for the creation and accomplishment of their learning programs; and (5) to broaden the base of those adult individuals and institutions who directly participate in the education of youth.

PATTERNS OF USE

EBCE is a comprehensive, full-time, self-contained alternative to traditional high school education programs. To select general concepts and generic courses as the basis for a yearlong learning program, each student uses credit requirements and measured and self-assessed ability, interests, and temperament characteristics. Learning activities are interdisciplinary, focus on community-site activity, and are continuously generated in response to the students' overall program goals.

The program is process oriented rather than materials oriented. Major program documents allow students and staff to select the most appropriate personalized pattern of overall learning objectives and goals; to continually create specific learning activities keyed to the overall program and specific sites and adults; to place students with adults who will assist them in achieving the selected objectives; to supplement onsite experiences with other learning resources (such as texts and films) to assure that the specified learning has occurred; to evaluate and document the learning activities and outcomes; and to use each set of experiences in creating subsequent learning activities.

The program's structure is flexible so that the students have practically infinite choice as to what, when, and how they will learn. The determining factor is the type and number of participating adults.

ASSESSMENT PROVISIONS

At the outset, transcripts, standardized tests (e.g., GATB, ITED, and OVIS), and special self-assessment measures aid students and staff in jointly selecting overall program areas and goals. Specific learning objectives, products, and assessment criteria are built into subsequent learning activity. The LC and the student jointly review and discuss the events and outcomes of each site activity to assess how well the specified objectives have been met and to identify any meaningful, serendipitous learning which has occurred. Such assessments guide the joint selection of the next set of activities (objectives, activities, and site choice). Credit "points" are awarded for each learning activity and cumulatively translated into course credits and grades.

TIME REQUIREMENTS

EBCE is a full-time alternative to regular high school for periods ranging from one to four semesters. Onsite experiences average 4 days per week, with the 5th day spent in student-LC conferences, special projects and studies, group guidance sessions, or other learning activities.

IMPLEMENTATION PROCEDURES

Special facilities requirements consist of a student learning center providing room for individual study, a small-group discussion/meeting room, small private/semiprivate offices for each LC, and space for limited clerical/logistics support personnel.

Intensive training will be required for the program staff, both preservice and inservice, because the instructional and administrative functions differ markedly from those found in traditional educational programs.

Program materials (guides and manuals) and resources (community sites) have proven highly durable and functional over 3 years of tightly controlled and evaluated operation. The reaction of the community (participating adults and institutions, parents, and educational authorities) has been consistently supportive; significant negative effects have not been discovered. The uniqueness of the program requires revisions in a majority of the participants' attitudes toward their roles and responsibilities within the educational process (e.g., content-oriented teachers must become process- and facilitation-oriented coordinators; students must accept active responsibility for learning and decisionmaking; community adults must provide information and guidance beyond imparting specific job training skills).

The program has been tested in only one community. Both internal and external reviewers have judged that the program will be useful and effective in other communities, but this judgment remains to be tested during the 1975-76 school year when new communities are expected to adopt the program. The operational costs of the program are competitive with the costs of other special school programs (e.g., remedial, gifted, and cooperative). Program installation in new communities will require such activities as recruitment and analysis of community sites, selection and training of staff, selection and preparation of facilities, adaptation/supplementation of site-keyed program manuals and catalogs, and approval of EBCE credit translation mechanisms by local school officials. The developer can provide technical assistance and training.

Summary Cost Information

The average cost per student for consumable materials is approximately $20; the initial cost per learning coordinator for materials is approximately $250; and the average adopter might spend another $350 for shelf-reference materials. Thus, 40 students, 2 learning coordinators, and the average shelf-set supplement would require $1,550 for materials.

Continuation costs would then remain at $20 per student (local reproduction costs for materials) until the program expands past five learning coordinators (requiring additional shelf-set materials).

There would be additional costs related to learning coordinator training, site analysis training, and program operation. These costs would encompass materials, travel, and consultant time.

Personnel Required for Product Adoption and Implementation

It is estimated that the program can be implemented with a 1:20 staff/student ratio. Beyond about 60 students (in a medium to large community), a coordinator of site placements becomes necessary to maintain logistical control. This, plus administration, will add fractional units to the FTE cost. Current implementation estimates project approximately 80 person-days for training and several person-months of local time for installation (e.g., site recruitment).

ASSURANCES AND CLAIMS

Assurances

The program has been operationally tested in only 1 community, but representatives of some 20 diverse school systems and several NIE-sponsored review groups have judged it highly transportable.

The program has served a deliberately selected cross section of the total population. Three years of internal evaluation (including testing with control groups), periodic opinion sampling of all types of participants, and external review panels have revealed no harm to the participants.

Similar evaluations and reviews have consistently found the program (materials and student outcomes) free of social or ethnic bias.

Claims

First, test results indicate certain positive student outcomes. EBCE students have performed on a level with controls on achievement measures and measures of career maturity and decisionmaking. Parents, participating adults, and visitors have observed that the students exhibit strong social and career maturity behaviors in adult settings.

Second, the delivery system is conceptually and structurally sound. It emphasizes planned, managed, and documented experiential learning, and is structured to respond to individual student needs. Both evaluation findings and observers, including Keith Goldhammer (dean, College of Education, Michigan State University) and Glenys Unruh (president, American Society of Curriculum Development), have verified the capabilities of the system.

Third, the continued operation of the program for 3 years, participation by hundreds of adults, student and parental enthusiasm, findings of external reviewers, and responses of about 20 other communities indicate that several basic assumptions about experiential education have been verified. Specifically, it was found that students and adults will participate without pay; that parents and community institutions are eager to play a more active role in education; that career and academic learning can occur and be managed experientially; that school systems will participate; and that expanded, generalist staff roles can enhance some aspects of learning (e.g., career guidance) without diminishing others (e.g., general academic performance).

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student set: Interest, ability, and temperament matrix; activity sheets; student program profile; reporting forms; concepts and objectives/course matrix; site learning guides	1 per student	20.00*	Yearly	
Learning coordinator set: Site analysis learning guides; cross-reference catalogs; implementation manual; concepts/objectives manuals; course lisings; standard activity sheet manuals	1 per LC	250.00	Reusable	
Shelf reference set	1 per 5 LC's	700.00**	Reusable	

*Estimated at actual reproduction costs; no external distribution.

**Composed of commercially obtainable materials generally available to adopting systems, either originals or suitable substitutes; hence most of the cost would not apply.

DEVELOPER/AUTHOR:

Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W.Va. 25325

AVAILABILITY

Program resources (materials and technical assistance staff) are currently available to those communities which agree to participate in NIE's and AEL's 3-year implementation plan.

For further information, contact:
Experience-Based Career Education
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W.Va. 25325

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 004

FAR WEST LABORATORY EXPERIENCE-BASED CAREER EDUCATION

A experience-based alternative to traditional secondary school formats

Far West Laboratory Experience-Based Career Education (FWL-EBCE) was developed to provide students in grades 10, 11, and 12 with a full-time alternative, comprehensive high school program. By focusing on direct experience in a wide variety of real-life settings, EBCE seeks to provide students with a secondary education in such a way that they acquire the skills and knowledge necessary to choose, enter, advance, and find satisfaction in an adult role. Individually planned learning programs utilize large and small businesses, governmental agencies, community institutions, and individual professionals and entrepreneurs.

The pilot program serves a citywide, ethnically mixed clientele with a broad spectrum of intellectual capacity, but is suitable for other types of communities. It can be staffed from existing school district personnel, with a staff/student ratio financially feasible in most communities.

FWL-EBCE is experience based: Students learn traditional subject matter in work settings and learn how to relate to adults at work. It is career oriented: Students gain a broad understanding of the world of work—its rewards and shortcomings—and develop the decisionmaking skills and knowledge of self necessary for making informed career choices. It is student centered: Students act as planners, decisionmakers, and self-evaluators, and learn to face the consequences of their decisions.

Resources are organized into courselike groupings called "packages," which contain goals and guidelines for planning individualized projects in career/subject fields.

Learning coordinators work with 25 to 30 students each, helping them develop long-range goals, shorter range objectives, and project plans. They also monitor progress, provide feedback, and help evaluate performance. The resource analyst is responsible for developing and maintaining the external resource persons and organizations; the skills specialist coordinates supplementary learning activities, such as tutoring in basic skills; and the director is the instructional leader of the school.

A 20- to 26-member Policy Advisory Board, representing employers, unions, professional and business associations, independent professionals and entrepreneurs, parents, students, the school district central office, community colleges, and community organizations, serves to assist with implementation, including the recruitment and maintenance of learning resources.

Upon entering the program, students receive a 3-week orientation to become acclimated to EBCE and begin assessment of interests, abilities, achievement, career goals, and educational needs. During orientation, long-range goals are specified, and students plan and conduct a brief miniproject. Students then plan in greater detail and complete individually planned projects which require and promote growth in academic skills and career awareness. Students are not expected to develop basic skills competence solely through working with resource persons or organizations. When indicated, students' projects also include planned supplementary instruction. Limited course work may also be part of a project. Graduates receive regular high school diplomas, with credit in regular subjects.

SUBJECT AREA(S)

The subject area is a comprehensive program in which course credit can be earned for any regular high school course.

INTENDED USERS AND BENEFICIARIES

FWL-EBCE was designed so that it could be adopted and installed in any school district which operates high schools that enroll students in grades 10, 11, and 12. Although the pilot program was developed in an ethnically mixed urban community, the developers designed the model so that it can be adopted in a wide variety of communities. The clientele in the pilot program represents a cross section of the ethnic identity, sex, school achievement, and socioeconomic level of the total community.

GOAL(S) OR PURPOSE(S)

The broad goals of FWL-EBCE are to provide students with a comprehensive secondary education and career development skills. Course credit can be earned at various institutions. For example, credit for biology can be obtained from medical research laboratories, hospitals, and veterinary clinics; mathematics reqiurements can be met in architectural organizations. When a resource person or organization does not provide all the appropriate experience for course credit, the project may include some supplementary work such as tutorials, programed instruction, or a course in a community college. The development of student skills and awareness in the areas of career decisionmaking and planning, self-development, oral communications, writing, reading, basic quantifying, interaction, and problem solving is the main objective. In addition, the student will develop and expand skills of inquiry and critical thinking in media skills, physical fitness and health, social and cultural awareness, political awareness, economic competence, technological skills, aesthetic/creative development, social science, science, mathematics, and foreign languages.

PATTERNS OF USE

Although FWL-EBCE was designed to be a complete program, the developer recognizes the likelihood of some partial adoptions. (Part-time for some students or some reduction in the number of grade levels enrolled are examples.) The initial dissemination effort is focused on adoption of the complete model.

FWL-EBCE is comprised of the following components: (1) Audiovisual Orientation (6-minute tape-slide presentation), (2) The Community Is The School, (3) Experience-Based Career Education—An Overview, (4) Resources Development and Support Handbook, (5) Student Recruitment and Selection, (6) Student Orientation Handbook, (7) Guide for Resource Persons and Community Organizations, (8) Student Guidance Handbook, (9) Prototype Learning Packages, (10) Learning Package Development and Implementation Handbook, (11) Supplementary Curriculum Handbook, (12) External Relations Handbook, (13) Administration Handbook, and (14) Final Evaluation Report—Fiscal Year 1974. Although these products may be used in any order, this sequence seems to have utility for those studying the feasibility of adopting the model.

ASSESSMENT PROVISIONS

Students are selected randomly from a pool of eligible volunteers who responded to a springtime recruitment drive in all junior and senior high schools. There are no prior interviews or tests. Transcripts of credits are reviewed to screen out those applicants who are more than one-half year below their age/grade level in credits earned toward graduation.

Once admitted to the program, students undergo a continuing process of diagnosis and assessment as they engage in long-range planning and project planning and implementation, and as they submit their completed projects for credit assignment.

TIME REQUIREMENTS

A full-time school calendar with two semesters per year is required.

IMPLEMENTATION PROCEDURES

The FWL-EBCE pilot program is located in a downtown office building in Oakland, California, near local and rapid transit lines. Instead of classrooms, the facility has conference rooms for Learning Coordinators to hold small group meetings as well as staff cubicles for individual conferences. Tape recorders for use of selected programed learning materials are on hand in addition to a few typewriters. The facility does not have a library because libraries are located out in the community like most other learning resources.

Some adopters of FWL-EBCE plan to use existing school facilities instead of a separate facility, and their experience will provide valuable information for future adopters.

Staff training and technical assistance are being provided to adopters by FWL-EBCE staff, who are also developing a network of service centers and demonstration sites to serve future adopters. State educational agencies will have major involvement in the design and functioning of the network.

Special user considerations are related to the need for extensive involvement of persons and organizations from the larger community. The procedures described in the External Relations Handbook can develop strong FWL-EBCE linkages to the larger community. A strong Policy Advisory Board is very helpful in the recruitment of a wide range of resources.

Personnel Required for Product Adoption and Implementation

Three suggested staff/student configurations are shown in the table below, each with the type of district employee who could fill the EBCE role.

PERSONNEL REQUIRED

FWL-EBCE Staff	100 students	250 students	500 students
Director (high school principal)		1	1
Director (high school vice principal, with specialization in curriculum and instruction)	1		1
Learning coordinator (teacher or counselor)	4	10	20
Skills specialist (teacher)	1	2	3
Resource analyst (teacher)	1	1	2
Secretary (school secretary)	1	1	1
Recorder (records clerk)	1	2	3

ASSURANCES AND CLAIMS

Assurances

Approximately 150 students have enrolled in the pilot program during its 3 years of operation in Oakland, California. Many students have spent 2 full years in the program. The socioeconomic status, ethnic, and male-female composition are representative of the general Oakland high school population. No negative effects have been noted. For some students FWL-EBCE is clearly less suitable than a more traditional classroom program, and provision should be made for easy transfer without penalty to a regular high school program.

FWL-EBCE students progress toward the diploma at least as rapidly as their counterparts in the regular high schools, as evidenced by the average number of credits earned per semester or school year. Credit is certified by counselors in the regular high schools. FWL-EBCE is not a handicap to college admission. The majority of graduates to date have gone on to community colleges, state colleges and universities, or 4-year private schools.

FWL-EBCE does not perpetuate occupational bias with regard to sex or race and, in fact, works vigorously against such stereotyping. Students are not preprogramed into career fields on the basis of test scores or socioeconomic characteristics but are encouraged to freely explore their full range of individual interests and opportunities.

Transportability has not been tested directly. However, 11 school districts have studied the pilot program and descriptive documents in detail and have concluded that the model can be adopted in their communities without major difficulty. Five of the districts are now preparing to implement FWL-EBCE by the next school year.

Claims

In general, most claims for FWL-EBCE must await the completion of the Fiscal Year 1975 External Summative Evaluation. The Fiscal Year 1974 Final Report gives evidence to support a limited number of claims. These are:

1. People serving as resources for the Far West Laboratory are positive in their support of the FWL-EBCE concept; sufficient resource persons were located and maintained to enable implementation of the FWL instructional program. Indications are that future FWL-EBCE programs can maintain sufficient pools of resources to provide necessary learning opportunities to their students.

2. Many students dissatisfied with regular schools see the FWL-EBCE program as relevant to their current and future needs. Almost all FWL students express a decided preference for the school's program over their previous program. Students' performance increased in both quality and quantity of work by gaining experience in the program and by adjusting to its requirements for personal motivation, direction, and responsibility.

3. Students and resource persons alike were enthusiastic about student growth in the area of self-development and interpersonal skills.

4. The learning of basic skills did not suffer through the elimination of classroom instruction: There was no significant difference in performance between the experimental and control groups although the remedial portion of the basic skills program was not fully in place until spring 1974. The primary emphasis of the program is on skills acquisition through field experience.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Audiovisual orientation	1 per district	25.00	Reusable	
Handbook and manuals (documentation of model)	10 sets per district	50.00	Reusable*	
Evaluation report	1 per district	20.00	To be updated annually	

*Handbook and manuals are reusable until the implementing district produces its own site-specific versions.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Robert Peterson, Project Director

AVAILABILITY

Prototype documentation will be available in summer 1975 to all State enforcement agencies who are willing to coordinate the requests for information about FWL-EBCE. Prototype documentation is available to any local enforcement agency (LEA) which sends (at LEA expense) one or more staff members for an orientation, 2-day "residency" at Far West Laboratory for Educational Research and Development.

Staff training and technical assistance will be given during spring 1975 to LEA's who adopt the whole model and will participate in the planned field test procedures. Other LEA's will receive staff training and technical assistance if FWL staff is available.

Beginning in fall 1975, the first FWL-EBCE Service Center will be in operation, and there will also be a demonstration site operating in conjunction with the center. Staff training and technical assistance manuals will be available in prototype form by winter 1976.

An audiovisual (8-minute tape-slide) presentation is available for creating special awareness, or a brochure, "The Community Is The School." All FWL-EBCE materials are available from:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

MANAGEMENT INTERNSHIPS: A NEW MODEL FOR YOUTH SOCIALIZATION AND LEARNING

A report on increasing on-the-job training by means of internships in general work skills

The widespread practice of credentialism by business compels many able youths to attend college to become qualified to hold significant jobs. At the same time, many critics are recognizing that modern colleges are poorly adapted for transmitting to students many necessary work skills and attitudes. This report describes a system for management internships designed to deal with this problem of unconstructive pressure toward college attendance.

Interns will be college-eligible persons without college degrees. They will be hired by employers and trained, over several years, to a job level typically occupied by employees entering with bachelor's degrees. The employer costs created by such training arrangements will be paid by both the interns and the government. Such costs will be based on the annual identifiable cost per student at typical State universities, i.e., approximately $3,000 per year. Interns will not spend a significant amount of their time on formal academic work, nor will they receive bachelor's degrees at the conclusion of their job responsibilities.

The intern who successfully completes the internship will possess a body of general work skills applicable to many jobs. Whether the graduated intern will stay with the employer will be determined by desires of the graduate and employer at the end of training; neither party is committed in advance to stay with each other.

A well-trained intern will have earned several references based on the qualified supervisor's firsthand observation of work which is performed. Such references should enable interns to obtain responsible jobs with those employers who are concerned with the low level of work skills possessed by many college graduates.

The proposed internship system parallels many of the features of existing State university systems, such as the sharing of costs between students and government. The system has actually been designed with a view to its ultimate adoption and financing by State governments—if the State will help to finance an eligible student's college learning, perhaps it should also help to finance valuable learning by college-eligible persons in other environments. The report proposes that the system be tried on an experimental basis for 4 years with 30 interns and 1 or more cooperating employers.

SUBJECT AREA(S)

Subject areas are skills and attitudes that foster on-the-job success in administrative and management level work.

INTENDED USERS AND BENEFICIARIES

The immediate users are persons who develop and analyze education and manpower policy, e.g., business executives, government administrators, and legislators. The ultimate users, when and if the model is applied, are youths 17- to 25-years-old and lower-level business and government executives.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To diminish the practice of credentialism, (2) to increase the amount and quality of on-the-job learning, and (3) to lessen the pressures on college-eligible youths to attend college when such attendance does not actually serve their central vocational needs.

PATTERNS OF USE

The model, if it is fostered with governmental assistance, can be applied by employers to replace the current credential-oriented practices applied by many businesses.

ASSESSMENT PROVISIONS

The model, which is also a proposal for funds to support pilot operation, includes an evaluation design. If the model were eventually put into large-scale operation, assessment would occur as a result of the self-assessing structures built into its design.

TIME REQUIREMENTS

A learner would take 2 to 5 years to complete the recommended cycle.

IMPLEMENTATION PROCEDURES

A trial of the model can be conducted via an experimental grant. If the model were routinely applied, many changes in State laws and business practices would be required.

MATERIALS AND EQUIPMENT

Summary Cost Information

The annual cost per trainee would be approximately the same as for a typical State university student, about $3,300 per year. Students would each contribute about $700 per year of this figure.

Installation and developmental costs would be minimal compared to operating costs.

ASSURANCES AND CLAIMS

Any pilot model will involve only a small number of trainees who will not be under an extraordinary risk—or at least no more "risk" than faced by the millions of college-eligible American youths who deliberately choose to go directly to work after high school rather than seek an academic credential.

If the model were gradually applied on a large scale and began to absorb one-third of our college-eligible youth population, it would obviously have a number of significant effects. The pros and cons of these effects are hypothetical, especially in view of the fact that the model has not even been tried on a pilot scale. The report does contain an extended discussion of some of the long-range implications of the model.

DEVELOPER/AUTHOR:

College of Education
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University of Illinois
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Chicago, Ill. 60680

Edward Wynne, Project Director

AVAILABILITY

The design for the model has been presented in a report delivered to the National Institute of Education. Copies of that report can be obtained through writing the project director. An article outlining some of the elements of the report has been submitted to appropriate journals for possible publication.

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INFORMATION CURRENT AS OF MARCH 1975 ■

INDIVIDUALIZED APPROACH TO INSTRUCTION AND ANCILLARY MAINTENANCE ACTIVITIES IN FAMILY CORE CURRICULUM

A course specifically designed as a companion to vocational training oriented toward providing "life skills"

This approach is oriented toward providing the so-called "Life Skill" effect and is mandatory for all entering students.

There are four curriculum areas involved: Health education, consumer education, home management, and parent involvement.

Health education is designed to provide students with necessary health education concepts and experiences that are felt to be minimally relevant to their ability to function independent of outside medical assistance except where necessary.

Consumer education provides the student with basic principles of protection from overzealous business persons and with certain basics of money management.

Home management emphasizes nutrition, grooming, and basic home-management principles.

Parent involvement progresses from a basic child-parent interaction course to infant-through-adolescent problems and solutions.

SUBJECT AREA(S)

Ancillary maintenance activities in family core curriculum; specifically, health education, consumer education, home management, and parent involvement are the subject areas involved.

INTENDED USERS AND BENEFICIARIES

This area has been specifically designed as a companion to vocational training, especially in instances where basic home skills are found to be deficient to such an extent that employment and associated socioeconomic opportunities are jeopardized. Obviously, some of the skills taught in family core curriculum are to be found useful with other than disadvantaged students as well. Some suggested beneficiaries are: Rural secondary schools; urban secondary schools; adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

The primary purpose of this curriculum is to mobilize and maintain certain personal resources necessary to finding and keeping a job.

PATTERNS OF USE

These courses are designed to provide individualized instruction with the Mountain Plains Learning System format for an average of 4 weeks early in the students' training period. In addition, each of the curriculum areas—consumer education, health education, home management, and parent involvement—provides continuing counseling and advisory service as a particular student demand for this type of service arises.

ASSESSMENT PROVISIONS

In fostering an open-entry/open-exit concept, preentry course tests are administered under controlled conditions in a testing center. Initial diagnoses are made there. Unit-level postcognitive tests, and in some instances performance tests, are given in the instructional areas by instructors and/or aides to determine when a student may proceed to the next learning segment. Student-administered and student-scored (Learning Activity Package) tests occur following each LAP, and final course tests are again given in the testing center.

An external evaluation provides a followup study of Mountain Plains graduates to determine the extent of effectiveness of the family core curriculum instruction.

TIME REQUIREMENTS

The program is designed to allow a maximum of 4 weeks for a student to move through this phase. In actual practice, it is found that faster students are able to negotiate all of the learning activities in a minimum of 2-1/2 weeks, and the slowest individuals do need the maximum of 4 weeks.

IMPLEMENTATION PROCEDURES

Teacher orientation to the philosophy of individualized instruction is necessary for success in using this system. A guide to orientation is contained in the document, *Design for Field Testing of Mountain Plains Curriculum*.

MATERIALS AND EQUIPMENT

Materials are currently incomplete and unavailable. Costs have not been established. At present, the following materials are being developed and/or refined:

- Learning Activity Packages (LAP's)
- Learning Experience Guides (LEG's)
- Course job title pretests and posttests
- Teacher's manual
- Student progress records
- Student work plans
- Administrator's guide to using the Mountain Plains System
- Performance activity list.

Personnel Required for Product Adoption and Implementation

Optimum ratio is considered to be 1 instructor, qualified by background and experience, for each 20 students. One teaching and/or clerical aide is also necessary for each 20 students. Where multiple classes are mutually accessible, 1 aide can provide necessary assistance to 40 students.

Cognitive and performance testing, as well as instructional prescribing, can be managed by the instructor/aide team without the assistance of test center personnel. Initial installation of the Mountain Plains Instructional System should take place in a quasi controlled environment; one person, knowledgeable about this system and its theoretical and functional base, should orient staff and students and then monitor progress of both until insured of its continued success. One such person can manage several instructors and their students.

ASSURANCES AND CLAIMS

Followup studies indicate that students are more competent with regard to family health care and that they retain and value buying and budgeting skills.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
Glasgow AFB, Mont. 59231

Bruce C. Perryman, Project Director

AVAILABILITY

Products are to be completed and are under developmental copyright. At present, they are not available to the general public.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 007

INDIVIDUALIZED APPROACH TO INSTRUCTION IN THE BUILDING TRADES AND SERVICES

A curriculum designed for those students planning to enter the building trades

This is an individualized approach to learning cognitively and performance-oriented concepts in a variety of job titles in the building trades. The curriculum was designed and/or selected by crafts persons in the trades for its usefulness to those entering certain trades and produced in the Mountain Plains (MP) format.

In keeping the MP design, the job titles and courses in building trades are open-entry/exit, allow for independent study, and provide the means for students to progress at rates suitable to their abilities and aspiration levels.

There are 10 curriculum areas (CA's) incorporated under the building trades and services heading. Each CA is a job title and provides a background suitable for the student, upon completion, for entry into the labor market in the specific job title area. Each course in the job titles is complete with pretests and posttests, learning experience guides, and learning activity packages which provide students with the vehicle for independent progression throughout the course, and total information concerning objectives, performance criteria, rationale, and procedures for progressing through a given learning segment.

SUBJECT AREA(S)

Career education in the building trades and services.

There are 10 curriculum areas—each a job title and course by definition: Carpenter, electronics assembler, electrical wireperson, plumber, heating systems serviceperson, refrigeration/cooling systems mechanic, appliance serviceperson, radio and TV serviceperson, electric motor repairperson, and draftsperson.

Accompanying each course and unit is a Learning Experience Guide (LEG) which directs the student to the requirements of that learning segment. Included in each LEG is a list of objectives, evaluation requirements, performance criteria, and other information intended to give the student and others a capsule view of the contents of that course or unit.

Criterion-referenced cognitive pretests and posttests accompany each course; cognitive posttests, and in some instances postperformance tests, accompany the units. Each Learning Activity Package (LAP)has a test which is included for student use in determining progress.

INTENDED USERS AND BENEFICIARIES

The learning system was designed specifically for use with rurally disadvantaged students in a residential setting. It is distinguishable from conventional systems by its association with support programs in the Mountain Plains context (e.g., prescriptive foundation education background courses, life skill support courses) and by its individualization. Consequently, it is conceivable that the system could be used in a variety of related settings, specifically: Rural secondary schools, urban secondary schools, adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

The system used with each of these courses has been designed to provide students with a solid medium for learning building trades and services entry skills at independent rates of learning, allowing them access to an income-producing mode of living in the quickest time possible.

PATTERNS OF USE

By virtue of their being constructed in modules with varying degrees of interdependence, these courses lend themselves to prescriptive teaching. Learning difficulties are diagnosed, and students are directed into those courses and units necessary to their attainment of prescribed entry-skill levels. The role of the instructor is transformed from a traditional classroom teacher to a "curriculum manager," or a resource person and guidance person. Individual attention to student learning problems and associated problems provides for more professional use of the instructor and a greater degree of professional attention to student needs. For maximum effectiveness, aides and secretarial assistants are provided for detail work; ancillary student accounting, curriculum monitoring, data retrieval, and feedback systems are to be used in conjunction with the courses.

ASSESSMENT PROVISIONS

In fostering an open-entry/open-exit concept, preentry course tests are administered under controlled conditions in a testing center. Initial diagnoses are made there. Unit-level postcognitive tests, and in some instances performance tests, are given in the instructional areas by instructors and/or aides to determine when a student may proceed to the next learning segment. Student-administered and scored

LAP tests occur following each LAP, and final course tests are again given in the testing center.

In addition, curriculum and instructor effectiveness are monitored and evaluated by another dimension of evaluative devices.

TIME REQUIREMENTS

Although time requirements vary with student ability and aspirational levels, a time estimate is used as a guide in scheduling students. This time allotment is readjusted within a student accounting and scheduling system at 6-week intervals, or sooner in unusual instances. Average time, as currently used for these activities, is available down to the LAP level.

IMPLEMENTATION PROCEDURES

Teacher orientation to the philosophy of individualized instruction is necessary to success in using the system. A guide to orientation is contained in another document, *Design for Field Testing of Mountain Plains Curriculum.*

MATERIALS AND EQUIPMENT

Materials are currently incomplete and unavailable. Costs have not been established. At present, the following materials are being developed and/or refined:

Learning Activity Packages (LAP's)
Learning Experience Guides (LEG's)
Course job title pretests and posttests
Teacher's manual
Student progress records
Student work plans
Administrator's guide to using the Mountain Plains System
Performance activity list.

Personnel Required for Product Adoption and Implementation

Optimum ratio is considered to be 1 instructor, qualified by background and experience, for each 20 students. One teaching and/or clerical aide is also necessary for each 20 students. Where multiple classes are mutually accessible, 1 aide can provide necessary assistance to 40 students.

Cognitive and performance testing, as well as prescribing, can be managed by the instructor/aide team without the assistance of test center personnel. Initial installation of the Mountain Plains Instruction System should take place in a quasi-controlled environment; one person knowledgeable about this system and its theoretical and functional base should orient staff and students and then monitor progress of both until insured of its continued success. One such person can manage several instructors and their students.

ASSURANCES AND CLAIMS

Assurances

Research design provides an information feedback loop which insures that a variety of problems which may be encountered by staff and students can be detected and modified for the benefit of continuing curriculum program modification. A copyright search has been conducted in order to determine the extent of contamination of Mountain Plains products by commercial materials. Following the search, a more complete separation of such materials will ensue, allowing for a positive identification of other than Mountain Plains materials and a labeling of such. Building trades and services curriculum has been constructed to preclude biases aimed at ethnic groups or protected groups of any kind.

Claims

Hard evidence to substantiate Mountain Plains Learning System approach remains in a developmental state for the most part. Preliminary readouts based on interviews, questionnaires, and up-to-date subjective reactions indicate a number of significant advantages of this system over those commonly associated with public education. Some examples are: More useful skill training is imparted to more students over a shorter period of time, students express appreciation at knowing what is expected of them before beginning in a learning segment, and early evidence indicates short retention of useful concepts and skills is higher than that in traditionally oriented vocational-technical schools.

A "Preliminary Effects Study" in a state of preparation indicates that students in career education programs prefer "hands-on" rather than paper-oriented curriculums. The Mountain Plains "unified" curriculum approach, where human development rather than mass production is emphasized, is producing vertical and horizontal career mobility in former Mountain Plains students regardless of whether they are employed in work for which they have been trained.

Mountain Plains curriculum forces teacher-student interaction of a type which produces personal and social development in students as well as absorption of subject matter content. Mountain Plains individualization emphasis produces an additional humanizing effect by recognizing variances in learning rate and aspirational level.

The Mountain Plains System, when compared to union-sponsored programs, allows for individual rates of variance. (Union programs are time based; e.g., apprentices spend 1 year at a given activity before being allowed to progress, in spite of ability or lack thereof.)

The Mountain Plains System allows for a closer correlation of cognitive learning to hands-on activities. There is a hands-on reinforcement of cognitive learning during or shortly after classroom learning activities.

A continuing conflict, however, occurs between union restrictions and Mountain Plains objectives. Plumbing, carpenter, and electrical wireperson candidates are faced with the additional hurdle of entering unions when they leave Mountain Plains. Attempts to overcome this problem are receiving continuing attention by Mountain Plains personnel, who are negotiating for a more harmonious relationship with union officials. More success is expected with carpenter and plumber unions than with the electrical union. However, unions have been found to be more receptive to Mountain Plains students than others by virtue of their advanced training as compared to others without the background, and some successes have been realized in Mountain Plains graduates being accepted into trade unions.

Sixty-nine percent of building trades and services students have completed the course to date. Of this population, the average precenter monthly income was $415.15. Average monthly postcenter income within 6 months after graduation was $600. Forty-seven percent of these are reported to be working in jobs for which they were trained or in closely allied forms of work.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
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Bruce C. Perryman, Project Director

AVAILABILITY

Products are to be completed and are under developmental copyright. At present, they are not available to the general public.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 008

INDIVIDUALIZED APPROACH TO INSTRUCTION IN AUTOMOTIVE AND SMALL ENGINE REPAIR

A method to teach concepts and manipulative tasks related to the repair of automobiles and small engines

This is an individualized approach to the learning of concepts and manipulative tasks associated with automobile and small-engine repair. It is an open-entry/exit, competency-based method of teaching the most relevant topics in the most efficient cost-beneficial manner. Criterion-reference tests, built in the Mountain Plains Learning Systems format, diagnose learning difficulties, provide a basis for prescriptive instruction, and determine whether a student progresses from one learning segment to the next. Performance tests are used at unit endings and provide the determining factor in student progression from one unit to the next. Time is not usually considered a determining factor.

SUBJECT AREA(S)

Career education in automotive and small-engine repair is the subject area.

INTENDED USERS AND BENEFICIARIES

These curriculum areas were designed for rurally disadvantaged students in a residential setting. Reading levels are controlled, instructions to procedures are concise and often simplified, and theoretical instruction is cut to the basic minimum. Cognitive tests are used, but performance tests are often used in addition to or instead of cognitive tests.

This instructional program can be used by itself. Within the Mountain Plains Total Learning System, this program is accompanied by support programs. The automotive and small-engines curriculum areas would be ideally suited to a variety of settings, specifically: Rural secondary schools; urban secondary schools; adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

These curriculum areas have been designed to provide the most necessary learning experiences relevant to securing and keeping a related job.

PATTERNS OF USE

Mountain Plains-designed diagnostic tests aid in the determination of learning segments a student will enter. Further testing provides the means for leaving one unit and beginning another. Learning Activity Packages (LAP's) are available for individual student use. Progress is consistent with individual capabilities. Worksheets are used to set up job-oriented training tasks. Each is directly related to an LAP, which has an objective consistent with the worksheet requirement. Instructors are used in a professional role, in conjunction with secretarial and teaching aides.

ASSESSMENT PROVISIONS

In fostering an open-entry/open-exit concept, preentry course tests are administered under controlled conditions in a testing center. Initial diagnoses are made there. Unit-level postcognitive tests, and in some instances performance tests, are given in the instructional areas by instructors and/or aides to determine when a student may proceed to the next learning segment. Student-administered and student-scored LAP tests occur following each LAP, and final course tests are again given in the testing center.

Because of the nature of automotive and small-engines job titles and tasks, performance tests are used extensively at the unit level. These are the real determinants of student proficiency and provide access to sequencing and eventual attainment of job performing capabilities.

In addition, curriculum and instructor effectiveness is monitored and evaluated by another dimension of evaluative devices.

TIME REQUIREMENTS

Although time requirements vary with student ability and aspirational levels, a time estimate is used as a guide in scheduling students. This time allotment is readjusted within a student accounting and scheduling system at 6-week intervals, or sooner in unusual instances.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
Glasgow AFB, Mont. 59231

Bruce C. Perryman, Project Director

AVAILABILITY

Products are to be completed and are under developmental copyright. At present, they are not available to the general public.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 090 009

INDIVIDUALIZED APPROACH TO INSTRUCTION IN MARKETING AND TOURISM

A set of courses to train students to enter the job market in marketing and tourism

The *Individualized Approach to Instruction in Marketing and Tourism* contains three specific curriculum areas: "Lodging Services," "Food Services," and "Marketing and Distribution."

"Lodging Services" provides training for those who anticipate working in hotels, motels, hostelries, and other forms of guesthouses. This curriculum area consists of 3 courses and 15 units which combine to make up 5 job titles: "Maid," "Supervisory Housekeeper," "Desk Clerk," "Night Auditor," and "Assistant Manager Trainee."

"Food Services" is designed to prepare students for entry into the various types of food preparation jobs. The courses are arranged so that persons who cannot attain managerial status can receive training in other aspects of food-oriented work. This curriculum area consists of six courses and seven units which combine to make up seven job titles: "Restaurant Cook," "Institutional Cook," "Kitchen Supervisor Trainee," "Second Baker," "Bakery Manager Trainee," "Restaurant Manager Trainee," and "Chef Trainee."

"Marketing and Distribution" provides training for persons who anticipate working in jobs unrelated to tourism. Five job titles, supported by 13 courses and 32 units, are available: "Shipping and Receiving Clerk," "Checker-Cashier," "General Salesperson," "Professional Salesperson," and "Mid-Management Trainee."

All the curriculum areas in the approach are open entry/exit and are based on the Mountain Plains Learning System. They are individualized and include criterion-referenced cognitive tests built in the mountain plains format. Performance tests are provided, where appropriate, and are used to determine whether a student is ready to progress from one unit to another.

SUBJECT AREA(S)

Career education in marketing and tourism is the subject area.

INTENDED USERS AND BENEFICIARIES

The learning system was designed for use with rurally disadvantaged students in a residential setting. It is distinguishable from conventional systems by its association with support programs in the Mountain Plains context (e.g., prescriptive foundation education background courses, life skill support courses) and by its individualization. Consequently, it is conceivable that the system could be used in a variety of related settings, specifically: Rural secondary schools; urban secondary schools; adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

The curriculum areas under this heading are designed to provide students with training to prepare their entry into the job market in the work associated with marketing and tourism, a major contributor to the economy of the Mountain Plains region.

PATTERNS OF USE

These courses are divided into modules of varying degrees of interdependence. They lend themselves to prescriptive teaching. Learning difficulties are diagnosed, and students are enrolled in courses and units that are necessary for attainment of prescribed entry-skill levels. The role of the instructor is one of a resource and guidance person. Individual attention to student learning problems and associated problems provides for more professional use of the instructor and a greater degree of professional attention to student needs

ASSESSMENT PROVISIONS

In fostering an open-entry/open-exit concept, preentry course tests are administered under controlled conditions in a testing center. Initial diagnoses are made there. Unit-level postcognitive tests, and in some instances performance tests, are given in the instructional areas by instructors and/or aides to determine when a student may proceed to the next learning segment. Student-administered and student-scored (Learning Activity Package) tests occur following each LAP, and final course tests are again given in the testing center. In addition, curriculum and instructor effectiveness is monitored and evaluated by another dimension of evaluative devices.

TIME REQUIREMENTS

Although time requirements vary with student ability and aspirational levels, a time estimate is used as a guide in scheduling students. This time allotment is readjusted within a student accounting and scheduling system at 6-week intervals, or sooner in unusual instances.

IMPLEMENTATION PROCEDURES

Teacher orientation in the philosophy of individualized instruction is necessary for success in using this system. A guide to orientation is contained in the document, *Design for Field Testing of Mountain Plains Curriculum.*

MATERIALS AND EQUIPMENT

Materials are currently incomplete and unavailable. Costs have not been established. At present, the following materials are being developed and/or refined:

Learning Activity Packages (LAP's)
Learning Experience Guides (LEG's)
Course job title pretests and posttests
Teacher's manual
Student progress records
Student work plans
Administrator's guide to using the Mountain Plains System
Performance activity list.

Personnel Required for Product Adoption and Implementation

Optimum ratio is 1 instructor for each 20 students. One teaching and/or clerical aide is also necessary for each 20 students. Where multiple classes are mutually accessible, 1 aide can provide necessary assistance to 40 students.

Cognitive and performance testing, as well as prescribing, can be managed by the instructor/aide team without the assistance of test center personnel. Initial installation of the Mountain Plains Instructional System should take place in a quasi-controlled environment; one person knowledgeable about this system and its theoretical and functional base should orient staff and students and then monitor progress of both until insured of its continued success. One such person can manage several instructors and their students.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
Glasgow AFB, Mont. 59231

Bruce C. Perryman, Project Director

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

INDIVIDUALIZED APPROACH TO INSTRUCTION IN OFFICE EDUCATION

A learning system emphasizing training for entry occupations in office education

This product utilizes the individualized approach in training for entry occupations in office education. Students are provided with criterion-referenced pretests that provide diagnosis of learning difficulties and prescriptive assignment to specific courses and units. Completion of a given learning segment depends on satisfactory accomplishment of stated objectives for that segment. The system contains a career-ladder effect—partial completers can enter less demanding job titles. The system provides instructions through use of the learning experience guides, courses, units, and the learning activity packages that are keyed to student performance objectives.

The curriculum contains 16 courses, 69 units, and 322 learning activity packages (LAP's) which together make up 6 job titles. (After receiving this training, students will be capable of performing the tasks demanded of them under actual working conditions in each of the job titles in the program or within subordinate job titles if they are included within a given major job title.)

SUBJECT AREA(S)

The subject area is office education.

INTENDED USERS AND BENEFICIARIES

The learning system was designed specifically for use with rurally disadvantaged students in a residential setting. It is distinguishable from conventional systems by its association with support programs in the Mountain Plains context (e.g., prescriptive Foundation Education background courses, Life Skill support courses) and by its individualization. Consequently, it is conceivable that the system could be used in a variety of related settings, specifically: Rural secondary schools, urban secondary schools, adult or career education—urban disadvantaged, postsecondary schools, vocational or career education centers, and penal and other institutions where inmate rehabilitation is in progress.

GOAL(S) OR PURPOSE(S)

This approach has been designed to provide students with an independent medium for learning office education entry skills by allowing them rapid access to an income-producing mode of living.

PATTERNS OF USE

Subject matter is standardized in the office education courses. This approach has adapted commercially available learning materials and provided the student with an alternative to learning in a conventional classroom organization. Students can, in some instances, complete learning segments independently by using the learning activity packages and other autotutorial devices.

ASSESSMENT PROVISIONS

In fostering an "open-entry/open-exit" concept, preentry course tests are administered under controlled conditions in a testing center. Unit-level postcognitive tests, and in some instances performance tests, are given in the instructional areas to determine when a student may proceed to the next learning segment. Student-administered and scored (Learning Activity Package) tests occur following each LAP, and final course tests are again given in the testing center.

Individualized Approaches to Instruction in Office Education makes greater use of commercially prepared tests than other occupational areas do. There are many good tests available in this area. In addition, it seems that some of the concepts and skills to be learned in the program can better be measured through the use of tests which have been specifically designed to match the content and objectives of these commercially prepared courses.

TIME REQUIREMENTS

Although time requirements vary with student ability and aspirational levels, a time estimate is used as a guide in scheduling students. This time allotment is adjusted within a student accounting and scheduling system at 6-week intervals, or sooner in unusual instances.

Since the product administers many course tests in the instructional area rather than at a test center, a significant amount of student time is spent in a testing mode.

IMPLEMENTATION PROCEDURES

Teacher orientation to the philosophy of individualized instruction is necessary for successful use of this system. A guide for orientation is contained in another document, *Design for Field Testing of Mountain Plains Curriculum.*

RD 090 010

MATERIALS AND EQUIPMENT

Materials are currently incomplete and unavailable. Costs have not been established. At present, the following materials are being developed and/or refined:

- Learning Activity Packages (LAP's)
- Learning Experience Guides (LEG's)
- Course job title pretests and posttests
- Teacher's manual
- Student progress records
- Student work plans
- Administrator's guide to using the Mountain Plains System
- Performance activity list.

Personnel Required for Product Adoption and Implementation

Optimum student-instructor ratio is 15 to 1. Clerical/instructional aides can work comfortably on a half-time basis, with an average student load of 40 per unit.

Cognitive and performance testing can be managed by the instructor/aide team, without the assistance of test-center personnel. Initial installation of the instructional system should take place in a quasi-controlled environment; one person knowledgeable about this system and its theoretical and functional base should orient staff and students and then monitor progress of both until insured of its continued success. One such person can manage several instructors and their students.

ASSURANCES AND CLAIMS

Assurances

Office education graduates are assured a high rate of placement upon leaving the program. They have a high degree of assurance that they will have a higher salary upon leaving than before entering. Also, there is evidence to indicate that their training period will be much briefer than public school counterparts, with similar financial rewards.

Claims

Mountain Plains Research Services Division is beginning to come up with some interesting statistics concerning the future of students who have completed one or more of the office education programs. From a student population of 105 heads of households who entered the program before January 1, 1975, 75 percent completed the course. Of those, 85 percent were found to be working in jobs for which they were trained, or in jobs closely related to such work. The average monthly salary of this group was $331.12 before entering the program and $432.61 within 6 months after completion.

DEVELOPER/AUTHOR:

Mountain Plains Education and Economic Development Program, Inc.
NIE MODEL IV
Glasgow AFB, Mont. 59231

Bruce C. Perryman, Project Director

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

Catalog of NIE Education Products

1975

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Virginia Y. Trotter, *Assistant Secretary for Education*

National Institute of Education
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EDUCATIONAL EQUITY

Handicapped

Multicultural/Bilingual Education

Sex Fairness

OVERVIEW

PHILLIP R. JONES
Indiana University
Bloomington, Indiana

The education of handicapped children encompasses programs and services for the mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, emotionally disturbed (behaviorally disordered), orthopedically or other health impaired, and the learning disabled. Various authors estimate from 10-18 percent of the school-age population have exceptionalities requiring special education. The Bureau of Education for the Handicapped (U.S. Office of Education) estimates that 12 percent (excluding the gifted and talented) are in need of special education. Considering the population of children from birth to age 21, this results in seven to eight million children requiring special education.

Historically, concern for the blind or deaf in the United States led to the establishment of residential institutions to serve their needs in the 1800's. Isolated public day school classes for the handicapped also can be identified around the turn of the century. A slow steady growth continued until the period following World War II when a marked expansion of programs is noted. This expansion was a result of the high percentage of illiterates found in preinduction examinations by the military and the concern for physically and emotionally handicapped veterans as they returned from military service. This influenced a general concern for habilitation and rehabilitation of the physically and emotionally handicapped.

Permissive legislation was approved by many State legislatures during the 1940's and 1950's This legislation basically allowed school districts to operate special education programs and services and receive categorical reimbursements if such programs met minimal standards.

The 1960's saw the advent of mandatory legislation for the handicapped which basically changed the word "may" to "shall" in existing legislation and continued categorical financial reimbursement. Such mandates, however, did not result in all handicapped children receiving service. The State of Michigan mandate is from birth to age 25; several States mandate services for 3- or 4-21, while others use normal school age 5- or 6-21. Since not all children were receiving required services, various parents and organizations have sought judicial relief with great success. The 1972 Pennsylvania consent agreement in a case brought by the Pennsylvania Association of Retarded Citizens and the 1972 decree in Mills v. Board of Education in the District of Columbia have assured the right to an appropriate education for the handicapped at public expense. Both of these cases were heard in Federal District Courts and are considered landmark cases in the field. Many other cases on the right to education, evaluation, and placement, and the right to treatment have been or currently are being resolved by the judicial branch of Government.

Dr. Phillip R. Jones is an Associate Professor in the School of Education at Indiana University, Bloomington, Indiana.

Currently, 48 States either have legislative mandates or court orders on the right to education for *all* handicapped children, yet only 50 percent of the population so defined is being served.

Special education has primarily grown up through the "major workhouse" arrangement known as self-contained, full-time special classes. This is inconsistent with the current trend of "mainstreaming" or serving most handicapped children in the regular classroom. This trend in the past few years has resulted from action initiated by individuals who were concerned with the effects of labeling, nondiscriminatory testing and evaluation, and segregation and isolation of the handicapped. The laws and courts speak to the concept of "least restrictive alternative" in serving the handicapped, with preference toward serving the mildly handicapped in the regular classroom with "backup services" available to assist the teacher. Reynolds (1962) proposed a framework for special education services which illustrates the least restrictive alternative concept or a full range of administrative arrangements to serve the handicapped child. The field did not heed Reynolds' words and now is being forced to follow his framework through laws and the courts.

It is indeed unfortunate that the term "mainstreaming" was ever coined. It has created confusion and misunderstanding in many communities throughout the country. The least restrictive alternative is a more easily understood concept. Reynolds' (1962) framework identified the services necessary to serve all handicapped children, beginning with a baseline of the regular classroom where most problems would be served. The levels identified above the baseline were: Regular classroom with consultation, regular classroom with supplementary teaching or treatment, regular classroom plus resource room service, part-time special class, full-time special class, special day school, residential school, hospital school, and hospitals and treatment centers. It was pointed out that most cases could be handled near the baseline or only a few levels above before entering the special class. The less severe cases are served closer to the baseline, while the more severe cases may need service at higher levels of the model. Reynolds' marginal notes are particularly significant wherein he cautioned to move only as far into the range of services as necessary and return as soon as feasible. Unfortunately, these latter two comments were largely ignored in educational programs for exceptional children. In fact, most schools offered no services between the regular class and the special class before the court's decisions.

Melcher (1972) raised many questions about how prepared regular educators and general administrators are to accommodate the handicapped child in the least restrictive environment. He cited the need for preservice and inservice education for general educators to meet the challenge. At the same time the laws and courts call for education for all or the "zero reject concept" as coined by Lilly (1970).

Costs

The financial resources of the schools seemed to have reached a peak and are declining. Research such as Rossmiller et al.(1970) entered the field of cost analysis of programs for exceptional children. When one inspects the indexes identified by Rossmiller, it is obvious that it does cost more to educate a handicapped child than a normal child. It is also obvious that the majority of children currently served are the least costly to serve. The multiple handicapped, severely and profoundly retarded, the seriously emotionally disturbed, etc., require extremely low pupil-teacher ratios and much expensive equipment which inflate the costs. However, one must also consider the cost of other programs in the schools which have low pupil-teacher ratios and other high costs to make fair comparisons with the Rossmiller data. For example, programs such as driver education, fourth-year foreign language, laboratory courses, etc., may in fact have a higher per capita cost than programs for handicapped children. Rossmiller and others who have studied costs of special education programs caution, however, against drawing conclusions based on their exploratory studies.

Federal intervention

Federal involvement in the education of exceptional children has increased slowly over the past 25 years and has been focused in the areas of personnel preparation, research, innovative programs, and aid to States in supporting special education programs (1974). The 93d Congress made it clear that monies appropriated were to be focused on serving the unserved population first and channeled into programs offering the least restrictive alternative environment, individualized planning and instrumentation, and due process procedures. Parental participation at these levels was required.

The introduction of the Education of All Handicapped Children Act during the 93d Congress suggested the need for comprehensive planning and greater financial assistance to the States for the purpose of educating children in "the least restrictive" environment. Although debate on the bill has centered on the funding formula, it is clear that increased Federal initiatives will be taken under this new comprehensive mandate.

Other related activities focus on the trend to deinstitutionalize the handicapped and provide services nearer the handicapped individual's home or community. Nondiscriminatory testing and evaluation have been required by the courts. Many other court cases relate to the field (Abeson et al., 1974; Abeson et al., 1975).

At the same time, the field of teacher negotiations may also impact on the education of exceptional children (Sosnowsky and Coleman, 1971).

Research and development

Studies of the efficacy of special classes show that a child in a special class did not show greater progress than a child remaining in the regular classroom. In many cases special class children did not do as well. Research now must be completed which focuses on children receiving services in the least restrictive environment. One such study, Programed Reentry Into Mainstream Education (PRIME), is currently being conducted by the Bureau of Education for the Handicapped (USOE). Other such studies are needed.

A long-term comprehensive study of financing special education programs is necessary to assist the local, State, and Federal educational agencies as they grapple with the economic issue. Cost analyses of the various administrative arrangements required to serve the handicapped are needed to delineate costs for "appropriate" programs required by the courts and law. Many schools adopted "mainstreaming" (locally defined) to save money, but one must ask if, in fact, children are receiving adequate services.

Research is necessary to determine if the effects of labeling, which were deemed detrimental in special classes, have been reduced or ameliorated.

The NIE has funded through its various programs products that relate to curricular concerns and the instruction of handicapped children as well as products which address the basic issue of the "least restrictive alternative." The product descriptions in the following section describe in greater detail current NIE-funded initiatives in practitioner-oriented research and development.

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SWRL SPEECH ARTICULATION KITS

A kit designed to correct four common speech articulation problems found among children in the primary grades

The *SWRL Speech Articulation Kits* provides research-based, school-verified resources for correcting four common speech articulation problems found among children in the primary grades. Kits are available for each of the following: Faulty (th) consonant, (w) for (r) substitution, (l) omission, and frontal and lateral lisp.

The kits increase the number of children who receive systematic and effective therapy by providing the speech clinician with a set of organized materials and methods and with procedures for utilizing the structured assistance of teachers, aides, pupils, and parents in correcting misarticulations.

After screening and testing children, the clinician uses the kit in a three-phase sequence which includes: Working with each child on specific difficulties and evoking the desired sound, training and supervising paraprofessionals to administer exercises in the kit which extend the child's use of the sound in a variety of contexts, and training parents to administer extension exercises in the kit which provide for carryover at home.

The clinician, aides, teachers, parents, and other pupils use the structured materials of the kit to help pupils extend desired sounds to all positions in words, sentences, and spontaneous speech.

Skills practiced in each *SWRL Speech Articulation Kit* include:

Isolation—Pronouncing sound in isolation with a vowel sound

Words: Initial position—Pronouncing words beginning with the sound and then pronouncing words beginning with blend

Words: Ending position—Pronouncing words ending in the sound

Words: Medial position—Pronouncing words with the sound in the medial position

Sentence context—Producing single sentences containing words with the sound in any position

Story context—Using the sound in words while telling stories several sentences in length.

SUBJECT AREA(S)

The kits help clinicians correct speech articulation problems of primary grade children.

INTENDED USERS AND BENEFICIARIES

The kits were developed for use with all pupils who have speech articulation difficulties including: Faulty (th) consonant, (w) for (r) substitution, (l) omission, and frontal and lateral lisp.

Kit resources were designed for the use of speech clinicians in helping children evoke the desired sounds. Carefully structured procedures and materials also facilitate the use of teachers and aides in modifying speech under the supervision of a speech clinician. Additional materials are provided for the use of aides, pupils, and parents in extending the speech sounds developed by the clinician.

GOAL(S) OR PURPOSE(S)

The kits enable children to correctly and consistently produce the desired sounds under a variety of natural speech conditions.

PATTERNS OF USE

Initial work by the clinician with individual children is followed by administration of the articulation modification program and the provision of additional practice using the articulation extension program. Both these sets of materials may be administered by paraprofessionals or parents, under the clinician's supervision.

The sequence of procedures in working with individual children is as follows: (1) Assess and record each child's need, (2) work with each child on specific difficulties, (3) record progress on each skill, (4) assess and record continuous progress, (5) extend practice at school, (6) extend practice at home, and (7) assess and record individual results.

ASSESSMENT PROVISIONS

Pretests, enroute tests, and posttests are provided for frequent assessment and recording of each child's progress.

TIME REQUIREMENTS

Scheduling and time required for phase 1, the initial development of the desired speech sound, varies from child to child. Phase 2, use of the articulation modification program, requires a maximum of 15 20-minute sessions. Use of the articulation extension program, phase 3, requires approximately 20 minutes per day, 5 days per week, for a maximum of 3 weeks.

IMPLEMENTATION PROCEDURES

All resources necessary for screening pupils, for modifying and assessing speech, and for training and supervising paraprofessionals, teachers, and parents are provided. School-verified materials and procedures enable speech clinicians to assume all responsibility for implementing and monitoring the effective use of the kits.

Summary Cost Information

Materials required and their costs are the same for each of the speech articulation kits.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures comprising the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 3 tryouts involving in the aggregate more than 10 classrooms and 80 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product transportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, and religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products, and the criteria against which the instructional product has been evaluated during development, provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions, apart from SWRL, a set of procedures referred to as quality assurance (QA) has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and are available for sharing with parents. This information has proved especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars		Replacement Rate and Cost	Source if Different from Distributor
		List price	*Net Price*		
Supervisor's manual	1	1.32	.99	Reusable	
Articulation modification program	1 per 5 pupils	5.52	4.14	Reusable	
Articulation extension program	1 per 5 pupils	1.32	.99	Reusable	
Articulation extension stimulus booklet	1 per 5 pupils	1.44	1.08	Yearly	
Articulation scorecard (25 per package)	1 per 25 pupils	2.96	2.22	Yearly	
Articulation record card (25 per package)	1 per 25 pupils	2.64	1.98	Yearly	
Articulation assessment booklet	1	1.12	.84	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *Speech Articulation Kits* was copyrighted in 1973 and is currently available from:
American Book Co.
450 West 33d St.
New York, N.Y. 10001

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 100 002

WEEKLY MEAL SEQUENCE PROGRAM (A PROGRAM TO TEACH FOOD PREPARATION SKILLS TO THE RETARDED)

A program to teach food preparation skills to handicapped children

Basic food skills are an important part of everyone's life. They are essential skills to teach to the handicapped as one step on the way to independent living. The *Weekly Meal Sequence Program* is a comprehensive and detailed program to teach preparation of foods to handicapped children. The program is divided into the following sections: (1) A description of the entry skills which the pupil should have prior to working with the weekly sequence, (2) a checklist of the steps in the sequence, (3) an explanation of each step in the sequence, (4) a series of food preparation task analyses, (5) guidelines for preparing further task analyses, (6) a section on data collection, (7) a section on optional motivational programs, and (8) a miniprogram on following directions.

The *Weekly Meal Sequence Program* takes the learner through all steps of food preparation, including balanced meal planning, budgeting, menu preparation, shopping, recipe reading, food preparation, serving, and cleanup.

This program is easily individualized according to the entry skill level of each pupil. The program is carefully sequenced to take pupils from a level of teacher-directed and guided activities to independent and self-directed food preparation. The recipes are presented in varying levels of difficulty with full-picture recipes for the nonreader.

SUBJECT AREA(S)

Home economics, basic life skills: The *Weekly Meal Sequence Program* teaches the skills of basic food preparation.

INTENDED USERS AND BENEFICIARIES

Although this product is designed to be used with the moderately handicapped pupil, aged 10 through adult, the sequence could be useful for those teaching food preparation to pupils of any age or ability. This sequence could be implemented by teachers, aides, or parents.

GOAL(S) OR PURPOSE(S)

The goals of this product are to enable pupils: To be able to plan balanced meals, to budget and shop for necessary food items, to read and follow recipes, and to prepare and serve simple foods.

PATTERNS OF USE

The units of the program are sequential and cumulative, but entry into the sequence is based on pupil ability.

ASSESSMENT PROVISIONS

Student evaluation is built into the program and is a part of the daily activities.

TIME REQUIREMENTS

Because each portion of the program is criterion referenced, timespan depends on pupil entry skills and abilities. The program is designed for daily use, 1/2 hour per day.

IMPLEMENTATION PROCEDURES

The *Weekly Meal Sequence Program* requires access to a kitchen facility and grocery store. No other special equipment is required. Although some of the program can be used in group work, parts are better utilized with individual assessment and teaching for each pupil.

Summary Cost Information

Because the product is still in draft form, cost information cannot be determined

Personnel Required for Product Adoption and Implementation

A classroom teacher or parent without special training may use this material.

ASSURANCES AND CLAIMS

The kitchen is a potential site for accidents with low-functioning children. Kitchen safety rules have been included in the program, and there have been no accidents in the program's initial use.

The program is intended to be used with persons of both sexes. There is no stereotyping of the role of the food preparer.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Fully stocked kitchen facility	1 per school	Varies	Reusable	
Weekly Meal Sequence Program	1 per school	Not determined	Reusable	

DEVELOPER/AUTHOR:

Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

Maria White, Head Teacher, Homeliving Area
Marie Eaton, Team II Coordinator
Norris G. Haring, Project Director

AVAILABILITY

This program is in its second revision and is still being field tested at the Experimental Education Unit and home economics classrooms in the Seattle area.

A revised version for public consumption will be available by fall 1975, at which time the product will be available upon request to:

Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

INFORMATION CURRENT AS OF APRIL 1975 ■

LIPPINCOTT'S COMPREHENSION QUESTIONS (SIX BOOKS, D THROUGH I)

A set of books to evaluate students' literal and inferential comprehension skills

Lippincott's Comprehension Questions provides for the daily assessment of students' literal and inferential comprehension in the *Lippincott Basic Reading Series*, 1970 edition, books D through I (grades 1-4). Three types of comprehension questions were written for each 50 running words of text: Recall, sequence, and interpretation. These questions require short written or oral responses. Recall questions deal with facts explicitly stated in the story (for example, "Who lived under the bridge?"). Sequence questions concern the action of the story (for example, "After the goat got over the bridge, what did it do?"). Interpretation questions require many different skills, including translation, inference, and synthesis (for example, "Why did the troll keep letting itself get tricked?"). Book I includes a measure of vocabulary presented in multiple choice format.

The suggested assignment per day is 500 words of oral or silent reading and 1 page of 30 comprehension questions. The time required to complete this assignment is approximately 30 minutes. Suggestions for modification of the program to meet student needs are provided.

SUBJECT AREA(S)

Lippincott's Comprehension Questions is made up of six books, each covering one grade level.

Within each book, the questions are arranged sequentially on the page so that the first question of each type deals with information from the beginning of the reading assignment, while the last questions of each type pertain to material from the final 50 words of the reading selection.

INTENDED USERS AND BENEFICIARIES

Lippincott's Comprehension Questions is designed to be used by students of all abilities in grades 1-4. This product was developed for intermediate-age, learning-disabled students but has been used successfully with emotionally disturbed, educable mentally retarded, and regular students.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to provide students with daily opportunities to respond to different types of comprehension questions.

PATTERNS OF USE

The comprehension exercises for each story may be used in any order. These questions are designed to be used in conjunction with the *Lippincott Basic Reading Series*. The product is not designed to be instructional in itself. The teacher is encouraged to modify the program in accordance with student needs and to add instructional or reinforcement components where feasible.

ASSESSMENT PROVISIONS

Students are placed in the *Lippincott Basic Reading Series* by means of a modified informal reading inventory developed by and available from the Curriculum Research Classroom. The inventory consists of three 100-word samples of reading from each Lippincott reader and corresponding comprehension questions. Students are assigned to the highest reader in which they attain an average 45-60 correct words per minute, 4-8 error words per minute, and 50-75 percent comprehension. There is no formal testing during instruction. Presumably student evaluation is an ongoing part of the teacher's activities. It is suggested that a student progress to the next higher reading level based upon improved performance or some criterion such as 90 percent comprehension over a 1-week period.

TIME REQUIREMENTS

The product is intended for use approximately 30 minutes daily.

IMPLEMENTATION PROCEDURES

No special training or organizational requirements are necessary for use except the availability of the *Lippincott Basic Reading Series*.

Summary Cost Information

The comprehension questions are available only in sets of eight books each, covering grades 1-4. The materials should be used as a supplement to the *Lippincott Basic Reading Series*, 1970 edition.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training may use this material.

ASSURANCES AND CLAIMS

Lippincott's Comprehension Questions has been used successfully for 3 years at the Experimental Education Unit by the developer and other teachers. The comprehension questions have been disseminated in many areas throughout the Northwest. The developer has received no reports of harm associated with the use of this product. The materials have been used with learning-disabled, emotionally disturbed, mentally retarded, and regular students.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Individual set (includes 8 books of comprehension questions)	1 set per student	10.00	Consumable each time unit is used	

DEVELOPER/AUTHOR:

Curriculum Research Classroom
Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

Cheryl L. Hansen, Head Teacher
Thomas C. Lovitt, Coordinator
Norris G. Haring, Project Director

AVAILABILITY

Lippincott's Comprehension Questions was developed and is being distributed on a limited basis for research purposes. Sets of the comprehension questions are currently available from the developer. Order from:

Purchasing Agent
Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

INFORMATION CURRENT AS OF APRIL 1975 ■

SPECIAL EDITION FOR HEARING-IMPAIRED STUDENTS, 1973 STANFORD ACHIEVEMENT TESTS

A complete achievement test battery adopted for use with hearing-impaired students

This is a complete achievement test battery, adapted for use with hearing-impaired students and standardized on a national representative sample (N=6,873) of hearing-impaired students in special educational programs for the hearing impaired.

The only other normative achievement data for hearing-impaired students was developed in 1959 on the Metropolitan Achievement Test, reading subtest, intermediate level, form B. Thus, this is the first time that a complete achievement testing procedure has been available which allows national normative comparisons to two essential reference groups: First, all normally hearing children (from the norms published with the regular edition), and second, all hearing-impaired children in the United States who are in special educational programs for the hearing impaired.

The special edition includes, as an essential step, a screening procedure for determining the appropriate level for full battery testing, since this cannot be done on the basis of grade assignment as with hearing children. Included also are practice test materials and directions for test administrators, including directions on administering the items in the various communication methods used in the education of the hearing impaired.

Scoring materials for hand scoring are available, as well as machine-scoring services which have been developed in collaboration with the Harcourt Brace Jovanovich (HBJ) Scoring Center in Iowa City, Iowa. The entire project has been undertaken in accordance with the terms of a licensing agreement between Harcourt Brace Jovanovich and the Office of Demographic Studies (ODS).

SUBJECT AREA(S)

The following subject areas are included in the test: Vocabulary, reading A, reading B, reading comprehension, word study skills, mathematics concepts, mathematics computation, mathematics applications, spelling, language, social science, science, and communication comprehension/listening comprehension.

INTENDED USERS AND BENEFICIARIES

Hearing-impaired students in special educational programs, aged 8 or above, are the intended users.

GOAL(S) OR PURPOSE(S)

The goal of this product is to provide accurate assessment of academic achievement, both in comparison to the general hearing school-age population and in comparison to hearing-impaired students across the country.

PATTERNS OF USE

The patterns of use are described in detail in the six administrator's manuals and supplementary materials. Procedures must be followed in a standardized fashion in order to make use of the standardized normative data for score interpretation.

ASSESSMENT PROVISIONS

This product is an assessment device for measuring school achievement. The screening procedures mentioned above and described in detail in the materials are an essential part of the testing procedure.

TIME REQUIREMENTS

Administration time for individual subtests ranges from 20 to 35 minutes. Total testing time for a complete battery ranges from approximately 3 hours to a maximum of approximately 5 hours. Administration is done in periods of no more than about 1 hour at a time, with liberal rest periods, and is generally conducted over the course of 3 or more class days.

IMPLEMENTATION PROCEDURES

No special equipment, facilities, or services are required. Only ordinary classroom and desk space, plus testing materials, pencils, and a clock or timer are required. The test is meant to be administered by classroom teachers who have prepared themselves by a careful reading of the directions for administering, and supplementary materials.

Children must be grouped according to test level being administered, which is determined by the screening procedure. This may require groupings other than the usual class groupings, since test levels are not to be determined on the basis of class or grade assignments.

Personnel Required for Product Adoption and Implementation

Test administration requires one prepared administrator per group of students, usually the classroom teacher. Scoring may be done by hand, by clerical personnel, or by machine through the Harcourt Brace Jovanovich Scoring Center in Iowa City, Iowa.

Summary Cost Information

Complete lists of materials, prices, and ordering information are contained in the sample sets. Scoring services are available only from the HBJ scoring center. Information about the scoring services, the scoring order forms, and all test materials are available only from the Office of Demographic Studies.

ASSURANCES AND CLAIMS

The purpose of the development of the SAT-HI was to provide a testing procedure for the hearing impaired as closely parallel as possible to the regular SAT, with only those differences necessary to provide accurate measurement for hearing-impaired students. This has been done to the best of the ability of the staff responsible, and this procedure is therefore as fair, harmless, and replicable as the regular SAT upon which it is based.

This test is the result of extensive previous developmental work, spanning a time period of 7 years, and testing results from over 30,000 hearing-impaired students in 2 national and 1 regional testing programs. The entire developmental process has been conducted in full public view and with the continuous input of a nationally representative group of educators, researchers, and others interested in the welfare of hearing-impaired people. This includes at least all the annual meetings of the National Advisory Committee since 1969, the special conference conducted by ODS on December 1, 1972, and the three regional workshops conducted by ODS during the 1973-74 school year. In addition, technical consultants were utilized, including the senior author of the SAT, Richard Madden. Detailed description of the developmental procedures is available upon request. This material was to be published, but the termination of funding makes the likelihood and time schedule for such publication unpredictable at present.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Sample sets:				
Screening test sample set	1	.50		
Primary level 1 sample set	1	1.35		
Level 2 sample set	1	1.65		
Level 3 sample set	1	1.65		
Level 4 sample set	1	1.85		
Level 5 sample set	1	1.85		
Advanced level sample set	1	1.25		
Complete sample set (includes all sample sets)	1	10.00		

DEVELOPER/AUTHOR:

Office of Demographic Studies
Gallaudet College
7th St. and Florida Ave. NE.
Washington, D.C. 20002

Raymond J. Trybus, Director

AVAILABILITY

All materials contained in the sample set are presently available for sale, and have been since fall 1974. The test materials carry a 1972 copyright by Harcourt Brace Jovanovich, Inc., New York. Adaptations have been made with the permission of the publisher, 1973.

Office of Demographic Studies
Gallaudet College
7th St. and Florida Ave. NE.
Washington, D.C. 20002

INFORMATION CURRENT AS OF MARCH 1975 ■

LINGUISTICS AND THE LANGUAGE OF DEAF CHILDREN

A text introducing transformational syntax to teachers of deaf children

The text is intended as an introduction to transformational syntax for teachers of deaf children or those who are training to be teachers. The book includes an introduction; seven chapters dealing with various aspects of syntax, each divided into sections of theoretical description and research applications; a final chapter, "Linguistics and the Language of Deaf Children"; appendixes on morphology and recent research findings; and a glossary of terms. The book may be used as a supplementary text in a college-level course or as a self-contained introduction to the subject for teachers studying on their own.

Although many introductory transformational grammar texts are available, most are esoteric and unrelated to practical English-teaching situations, while at the same time spreading their content over many diverse areas. On the other hand, most are based on older, sometimes outdated, linguistic frameworks. This text is an attempt to provide the teacher with the basic concepts of the relatively new and extremely important field of transformational-generative grammar and to relate these concepts to the task of teaching language to deaf students, while at the same time restricting itself to the important area of syntax so that concentration is possible.

The book is based on the premise that the theory of transformational grammar has importance in helping students acquire facility in an active, open-ended language system, as opposed to memorizing a limited number of "frozen" sentence patterns.

The reader may study at an individual rate and may vary sequencing to some extent, although there is some overlap between chapters. An inclusive index and bibliography also make the book well suited for review.

SUBJECT AREA(S)

Teacher education pertaining to teacher training in transformational grammar and its relationship to the teaching of deaf children is the subject area.

INTENDED USERS AND BENEFICIARIES

The book was written for teachers and teacher trainees.

GOAL(S) OR PURPOSE(S)

The goal of the book is to provide teachers of deaf children with information and knowledge about transformation grammar so that they can improve their skills in teaching language.

PATTERNS OF USE

Although there is a slight amount of back referencing, the chapters are basically independent. The book can be used in introductory transformational grammar courses and can also be used for review. It has a comprehensive table of contents, an index, and a glossary of terms. It could supplement a college course in linguistics or could be used on its own for individual study. It is self-contained.

DEVELOPER/AUTHOR:

Institute for Research on Exceptional Children
51 Gerty Dr.
Champaign, Ill. 61820

W. K. Russell
S. P. Quigley
D. J. Power

AVAILABILITY

Linguistics and the Language of Deaf Children **is currently being reviewed for publication. Until publication, inquiries should be addressed to the developer. Copyright is pending.**

INFORMATION CURRENT AS OF MARCH 1975 ■

HANDICAPPED

RD 100 006

THE TRAINING PROGRAM FOR PARENTS AND THERAPISTS OF AUTISTIC CHILDREN (PART OF THE INSTRUCTIONAL SYSTEMS PROGRAM)

A program to develop instructional programs to remedy the behavioral and learning disorders of autistic children

The work with severely disturbed children is intended to develop and test a set of instructional procedures that a parent or therapist can use to remediate the behavioral and learning disorders of autistic children and to educate them to the point where they can participate and learn in either a regular or a special school situation. This work with autistic children is designed to develop and evaluate general teaching procedures and curriculum materials that will become part of an overall teaching system for disturbed children.

The training program is in the form of a series of 13 written units. Each specifies detailed procedures to follow in accomplishing specific behavioral objectives in educating autistic children. These training manuals are written in a format which is easily followed by professional therapists and by many parents. The 13 units of the training program are: "An Introduction," "Data Taking," "Disruptive Behavior," "Simple Manipulative Tasks," "Motor Imitation," "Functional Speech," "Classroom Management," "Spontaneous Vocalizations," "Phoneme Expansion," "Verbal Imitation," "Syntax Acquisition Through the Use of Rebus Cards," "Initial Group Experience," and "Intermediate Group."

SUBJECT AREA(S)

Behavioral analysis, language acquisition, perceptual and motor development, social skills, health, and physical education are subject areas included.

INTENDED USERS AND BENEFICIARIES

Professional therapists (social workers, psychologists, teachers) parents, and autistic and severely disturbed children are the intended users.

GOAL(S) OR PURPOSE(S)

The major goal is to develop a set of instructional procedures that a parent or therapist could use to remediate the behavioral and learning disorders of autistic children.

PATTERNS OF USE

Units are sequential and cumulative.

ASSESSMENT PROVISIONS

Baseline data are collected by trained observers before instruction begins. Daily observations on particular behavior are made by the teacher or trained observer.

TIME REQUIREMENTS

A trainee should require no more than 20 weeks in a practicum setting to complete instruction.

IMPLEMENTATION PROCEDURES

Careful guidelines of implementation procedures are provided in the training manual.

ASSURANCES AND CLAIMS

Assurances

While no absolute assurances of harmlessness can be made for this product, it can be said that all phases of the training were conducted with parental consent and approval. Parents who were not satisfied with either the training or the progress of their children could withdraw from the program at any time, and several did. Throughout the training, weekly or biweekly conferences were scheduled with each participating parent. In addition, an observation room was set up so that parents could monitor actual training procedures whenever they chose.

Training was not differentiated by sex or race. The intent of the program was to dispel widely accepted stereotypes about autistic children, such as noneducability and nonresponsiveness to group instruction.

The program is not intended to be used alone. While the training manuals are written in a format which may be followed by professional therapists, the procedures cannot be recommended for parental use without supervised instruction and assistance.

With the ending of research activities associated with this product, a center for autism was formed under the initiative of a program staff member and several parents whose autistic children had received training. This group established a board of directors, a professional advisory committee, and has obtained the sponsorship of the Judevine Foundation. The teaching procedures developed for autistic children and the training program for parents and therapists have thus been spun off and are now the responsibility of an independent agency.

Claims

Before/after comparisons were made for autistic children who had been in training for at least 8 months. The comparisons were on four general classes of behavior—friendliness, speech, autistic seclusion, and illicit attention-getting behavior. The progress of children in overcoming these problems varied dramatically with the age at which they started training. The malleable age seemed to be 5 years or younger; nearly all of the children who started after turning 6 made, at the most, only fair progress. Improvement was especially evident for children under 6 whose mothers had developed high levels of competence in using the program.

The training program also seems to work best with autistic children who are initially highly disruptive, destructive, and aggressive as compared to children who are initially more placid.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 Training set includes 1 each of the 13 units	1 set per trainee	*		

*Materials in the *Training Program for Parents and Therapists of Autistic Children* are still in prototype stage. Therefore, no prices have been determined.

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Harriet Doss Willis, Program Director
David R. Buckholdt, Coauthor
Martin A. Kozloff, Coauthor

AVAILABILITY

The product is copyrighted. A search for a publisher for this product is underway. Please contact the developer for further information:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 100 007

CONFIGURATIONS OF CHANGE: THE INTEGRATION OF MILDLY HANDICAPPED CHILDREN INTO THE REGULAR CLASSROOM

Validated approaches to "mainstreaming"

As a result of a thorough survey and indepth study of existing mainstreaming efforts in school districts across the country, Kreinberg and Chow invited 20 innovative educational practitioners to contribute to the final edition of *Configurations of Change*. Several specific "successful" or "validated" approaches to mainstreaming are discussed in detail; the major focus of the product is upon broader issues and problems within the whole movement and upon programs that confronted these problems and attempted solutions that offer the most flexibility to educators. The authors analyze four problem areas common to all mainstreaming programs: Legal constraints, teacher preparation, instructional arrangements, and accountability procedures. These issues are examined in analytical papers and narratives of selected programs.

SUBJECT AREA(S)

The subject area is special education; specifically, mainstreaming.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers, administrators, and students interested in, or responsible for, programing in special education, particularly in mainstreaming certain handicapped children into regular classes.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to inform readers about some key issues in mainstreaming and to alert readers to the existence of mainstreaming programs in special education.

ASSURANCES AND CLAIMS

The materials were tested with users and found to be valuable.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Configurations of Change	1 copy	11.95	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Nancy Kreinberg, Senior Developer
Stanley H. L. Chow, Principal Investigator

AVAILABILITY

***Configuration of Change* is available from the distributor:**
Adapt Press
805 West Ave. North
Sioux Falls, S. Dak. 57104

INFORMATION CURRENT AS OF MARCH 1975 ■

INTEGRATING HANDICAPPED CHILDREN INTO REGULAR CLASSROOMS (WITH ABSTRACT BIBLIOGRAPHY)

A discussion of the desirability of integrating handicapped children into regular classrooms

This paper, based on an interview with Jennie Klein, director of educational services, Office of Child Development, stresses the desirability of integrating handicapped children into regular classrooms. Teachers are urged to view the handicapped child as a normal child with some special needs. Specific suggestions for the teacher are given: (1) Learn the details about handicaps that may be encountered; (2) work supportively with parents and find out as much as possible about the child; (3) arrange for the child's gradual transition into a classroom setting; (4) be aware of the range of normal behavior for the age group involved; (5) have positive but realistic expectations and focus on the child's strengths; (6) enforce the rules and limits of the class; (7) deal with the other children's reactions to the handicapped student; and (8) acknowledge personal feelings, attitudes, and levels of frustration. A short abstract bibliography on exceptional children is included.

INTENDED USERS AND BENEFICIARIES

This program is designed to help teachers and aides in preschool and elementary school settings who are beginning to integrate handicapped children into their classrooms. It is also instructional for school administrators and center directors responsible for facilitating this process.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to supply needed information on mainstreaming handicapped children to teachers and child care workers inexperienced in working with exceptional children. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Mary Z. Glockner, Author

AVAILABILITY

Order No. ED 081 500, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available (Catalog No. 1300-47) from the developer for $0.65.

Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 100 009

PARENTS AS TEACHERS: A RATIONALE FOR INVOLVING PARENTS IN THE EDUCATION OF YOUNG HANDICAPPED CHILDREN

A review describing a set of adverse factors that may hamper the development of the handicapped child

This review describes a set of adverse factors that may hamper the development of the handicapped child and contribute to cognitive dysfunction. A cumulative intellectual deficiency and an impairment in the affective aspects of the mother/child relationship operate in a mutually reinforcing manner to produce a negative effect on the child's overall development. It is suggested that remediation requires early intervention, the involvement of parents (particularly mothers), and extensive guidance and curricular aid to parents.

Subjects discussed in this paper include: (1) Parent involvement in the education of their young handicapped children, (2) home-based programs for handicapped children, (3) factors contributing to cumulative intellectual deficiency in the handicapped child and impairment of mother/child relationship, (4) motivational problems, and (5) cognitive development.

SUBJECT AREA(S)

The subject areas include parental involvement in the education of their young handicapped children, home-based programs for handicapped children, factors contributing to cumulative intellectual deficiency in the handicapped child and impairment of mother-child relationship, motivational problems, and cognitive development.

INTENDED USERS AND BENEFICIARIES

This paper was designed for educators and administrators responsible for planning and implementing programs for handicapped children and their parents.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to highlight the urgent need for parent participation in the education of their young handicapped children and the equally urgent need for planning and implementing programs which offer long-term guidance and direction for these parents.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Edith Levitt, Author
Shirley Cohen, Author

AVAILABILITY

Order No. ED 099 141, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

***Current Topics in Early Childhood Education* (in press):**
Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Dr.
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

UNDERSTANDING YOUNG CHILDREN: EMOTIONAL AND BEHAVIORAL DEVELOPMENT AND DISABILITIES

A booklet for training regular preschool teachers who work with emotionally and behaviorally handicapped children

This booklet offers teachers, paraprofessionals, and parents practical, easy-to-read suggestions to help them understand emotional and behavioral development and disabilities in young children. Through a variety of examples, the booklet emphasizes techniques that show the teacher how to encourage and assist the young child to move toward emotional maturity and self-discipline. This guide should prove helpful in training teachers and caregivers who work with handicapped children in a regular classroom. Cartoon-style drawings illustrate the text.

Subject areas discussed in this booklet include: Emotional and social development of preschool children; young children's behavior problems; teaching methods and the teacher's role; student-teacher relationship, discipline, and the student's self-concept; psychological patterns and social maturity; and regular class placement of the handicapped child.

INTENDED USERS AND BENEFICIARIES

This booklet is designed to be used in training teachers and aides who work with emotionally and behaviorally handicapped children in their regular preschool classrooms. It would also be of interest to early childhood directors and administrators and parents of handicapped children.

GOAL(S) OR PURPOSE(S)

The product's goal is to supply needed information on mainstreaming handicapped children to teachers and childcare workers inexperienced in working with exceptional children. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area. The booklet also provides some general ideas on the emotional and behavioral development of children.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Colleen Mayer, Author

AVAILABILITY

Order No. ED 092 258, $0.76 (microfiche), $3.32 (paper), add $0.26 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $1.75, catalog No. 115.
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 100 011

UNDERSTANDING YOUNG CHILDREN: LANGUAGE DEVELOPMENT AND LANGUAGE DISABILITIES

A booklet for training teachers and aides who work with children with language disabilities in their regular classrooms

This booklet offers practical, easy-to-read suggestions for teachers, paraprofessionals, and parents to help them understand language development and language disabilities. The first section highlights some of the factors involved in language development. The second section deals with some of the common causes for language disabilities and provides numerous suggestions for appropriate language activities. Cartoon-style drawings illustrate the text. This booklet should be especially helpful in the training of teachers and caregivers who work with handicapped children in a regular classroom.

Subjects discussed in this booklet include regular class placement of young children with language handicaps, early childhood language development and language activities, language patterns and auditory discrimination, and speech improvement and teaching methods.

INTENDED USERS AND BENEFICIARIES

This booklet is designed to be used in training teachers and aides who work with children with language disabilities in their regular classrooms. It would also be of interest to early childhood directors and administrators and parents of handicapped children.

GOAL(S) OR PURPOSE(S)

The product's goal is to supply needed information on mainstreaming handicapped children to teachers and child-care workers inexperienced in working with exceptional children. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area. The booklet also provides some general ideas on the development of language in children.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Colleen Mayer, Author

AVAILABILITY

Order No. ED 092 260, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available for $1.25, Catalog No. 117, from the developer:
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

UNDERSTANDING YOUNG CHILDREN: LEARNING DEVELOPMENT AND LEARNING DISABILITIES

A booklet for training teachers and aides who work with children with learning disabilities in their regular classrooms to recognize how the factors of heredity, maturation, and environment determine the degree of development an individual will achieve

This booklet offers practical, easy-to-read suggestions for teachers, paraprofessionals, and parents to help them understand learning development and learning disabilities. The text outlines how the factors of heredity, maturation, and environment determine the degree of development an individual will achieve. The characteristics of children with learning disabilities are described, and a number of special techniques to assist children in overcoming these disabilities are discussed. This text should prove especially helpful in the training of teachers and caregivers who work with handicapped children in regular classrooms. Cartoon-style drawings illustrate the text.

Subjects discussed in this booklet include: Regular class placement of young children with learning disabilities, early childhood learning activities and development tasks, cognitive development and multisensory learning, teaching methods and teacher role, student-teacher relationship, environmental influences, and maturation and self-concept.

INTENDED USERS AND BENEFICIARIES

This booklet is designed to be used in training teachers and aides who work with children with learning disabilities in their regular classrooms. It would also be of interest to early childhood directors and administrators, and parents of handicapped children.

GOAL(S) OR PURPOSE(S)

The product's goal is to supply needed information on mainstreaming handicapped children to teachers and child-care workers inexperienced in working with exceptional chidren. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area. The booklet also provides some general ideas on the development of learning processes in children.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Colleen Mayer, Author

AVAILABILITY

Order No. ED 092 259, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $1.25, catalog No. 116.

Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 100 013

UNDERSTANDING YOUNG CHILDREN: INTELLECTUAL DEVELOPMENT AND INTELLECTUAL DISABILITIES

A booklet for training regular classroom teachers and aides who work with children with intellectual disabilities

This booklet offers practical, easy-to-read suggestions for teachers, paraprofessionals, and parents to help them understand intellectual development and intellectual disabilities. The first section highlights some of the factors involved in intellectual development and the importance of being sensitive to different stages of learning. The second section deals with the intellectual disabilities and suggests a variety of learning activities to enhance development. The role that the teacher plays in fostering intellectual development is emphasized. The booklet should prove helpful in training teachers and caregivers who work with handicapped children in a regular classroom. Cartoon-style drawings illustrate the text.

Subjects discussed in this booklet include regular class placement of young children with mental disabilities; comprehension, memory, classification, and concept formation; teaching methods and student-teacher relationship; affective behavior and self-concept; and learning processes and intellectual development.

INTENDED USERS AND BENEFICIARIES

This booklet is designed to be used in training regular classroom teachers and aides who work with children with intellectual disabilities. It would also be of interest to early childhood directors and administrators and parents of handicapped children.

GOAL(S) OR PURPOSE(S)

The product's goal is to supply needed information on mainstreaming handicapped children to teachers and child-care workers inexperienced in working with exceptional children. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area. The booklet also provides some general ideas on the development of intelligence in children.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Colleen Mayer, Author

AVAILABILITY

Order No. ED 092 261, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
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P.O. Box 190
Arlington, Va. 22210

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Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

UNDERSTANDING YOUNG CHILDREN: THE HANDICAPPED CHILD IN THE NORMAL PRESCHOOL CLASS

A booklet for training teachers and aides who work with aurally, visually, and physically handicapped children

This booklet offers teachers, paraprofessionals, and parents practical, easy-to-read suggestions for working with the handicapped child in the normal preschool class. Each of the three sections (visual disabilities, hearing disabilities, and motor disabilities) emphasizes the importance of a warm, positive, accepting attitude on the part of the teacher. The text provides basic knowledge concerning visual, auditory, and motor disabilities, and includes a number of suggestions for integrating the handicapped child into the normal classroom routines. This text should prove especially helpful in the training of teachers and caregivers. Cartoon-style drawings illustrate the text.

Subject areas discussed in the booklet include: Regular class placement of the young handicapped child; teaching methods to be used with physically, visually, and aurally handicapped children; early childhood learning activities; audiolingual skills; classroom environment and student adjustment; and teacher role and student-teacher relationship.

INTENDED USERS AND BENEFICIARIES

This booklet is designed to be used in training teachers and aides who work with aurally, visually, and physically handicapped children in their regular preschool classrooms. It would also be of interest to early childhood directors and administrators, and parents of handicapped children.

GOAL(S) OR PURPOSE(S)

The product's goal is to supply needed information on mainstreaming handicapped children to teachers and child-care workers inexperienced in working with exceptional children. Recent State legislation and Head Start program requirements have sharply increased the need for information in this area.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Colleen Mayer, Author

AVAILABILITY

Order No. ED 092 257, $0.76 (microfiche), $3.32 (paper), add $0.26 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $1.75, catalog No. 114.
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

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OVERVIEW

SUSAN STAIRS
National Institute of Education
Washington, D.C.

The public school has long been regarded as a major cultural institution for assimilating the diverse ethnic groups in America. Until the mid-sixties, the predominant metaphor for describing American culture was the "melting pot." The public school was seen as the vehicle for teaching and absorbing diverse ethnic groups into the mainstream of American culture. While this view of assimilation in public education still has many adherents, the latter part of the 1960's witnessed the development of a trend toward cultural pluralism in education. In contrast to the view of assimilation, adherents of pluralism emphasize teaching both the native (nonmainstream) language and culture in education and the mainstream language and culture. They have stressed a multicultural approach in education for preserving the language, lifestyles, customs, and values of the child's native culture. Their metaphor characterizing American society is the "tossed salad" concept, not the "melting pot." Adherents of cultural pluralism emphasize the advantages of bringing diverse cultures together in an educational setting. The appreciation of different cultural heritages enriches the educational experience for both minority and majority children.

Although there is agreement among Federal, State, and local educational agencies on the need for supplementary services for culturally different children, there is some disagreement on the goals of such programs and the methods to be used to achieve these goals. Goals of assimilation and pluralism affect decisions about objectives and procedures for teaching culturally different children. Programs oriented toward assimilation usually seek to teach culturally or linguistically different children the cognitive, affective, and psychomotor skills required to function in the mainstream culture. Programs oriented toward pluralism seek to teach children the skills necessary to function in both the mainstream culture and their native culture. Proponents of pluralism argue that linguistically or culturally different children are enriched by learning about their original culture and that learning about their native culture can complement and enhance their learning about the mainstream American culture. They also argue that society benefits from input from a variety of life goals and lifestyles that are retained through this approach to Multicultural/Bilingual Education.

Methodological questions relating to specific techniques and approaches to teaching are influenced by the emphasis on either assimilation or pluralism in the multicultural/bilingual program. Programs emphasizing mainstream culture tend to be taught entirely in English. In the pluralistic approach, on the other hand, primary instruction is often in the child's native language, emphasizing the cultural/linguistic heritage of the student.

Ms. Susan Stairs is an Educational Program Specialist in Educational Equity, Multicultural/Bilingual Group, at the National Institute of Education, Washington, D.C.

R & D needs

Despite the controversy between the proponents of assimilation and pluralism, programs for culturally and/or linguistically different children are in need of research and development that address the following issues:

- The identification of instructional methods and materials appropriate for culturally and/or linguistically different children.
- The development of staff training techniques which will enable administrators and teachers to better understand the cognitive and affective needs of culturally and/or linguistically different pupils.
- The development of measures which identify teacher attitudes and behaviors that foster achievement on the part of culturally and/or linguistically different children.
- The development of norm-referenced as well as diagnostic/prescriptive methods to measure the achievement of linguistically and/or culturally different pupils and to assess the effectiveness of multicultural/bilingual programs.

NIE program efforts

These issues have guided NIE in the development of its multicultural/bilingual program. A discussion of some of the more important NIE research and development activities with a multicultural/bilingual purpose follows. The discussion is organized around three issue areas: Instructional materials, assessment instruments, and staff development techniques.

Instructional materials.—An extensive number of instructional materials designed for bilingual/bidialectical pupils have been developed. The Southwest Educational Development Laboratory (Austin, Texas) has produced a series of comprehensive instructional units that encourage simultaneous development of Spanish and English oral and written language skills. The entire multimedia package includes curriculum and staff development materials designed to teach concepts and skills to enable children to function in both native and mainstream culture. The Alaskan Reading and Language Development program at the Northwest Regional Educational Laboratory (Portland, Oregon) has produced a series of culturally relevant readers for Native Alaskan children. NWREL has also produced a variety of language arts materials for children based on the culture and traditions of the Plains, Plateau, and Coastal Indian tribes of the Northwest. Instructional materials have been developed at Central Midwestern Region Educational Laboratory (St. Louis, Missouri) that foster the acquisition of standard English by children who speak black dialects. These programs are all aimed at imparting both mainstream and native culture with the ultimate purpose of enhancing the child's capacity to function in both cultures.

To assist teachers in bilingual programs make more informed choices in instructional materials selection, the Educational Products Information Exchange (New York, New York) is developing a catalog of bilingual curriculum materials which will be a compilation and assessment of about 1,000 items in the Spanish, Chinese, Japanese, Korean, and Vietnamese languages.

Assessment instruments.–Several NIE products have been concerned with the development of assessment instruments for multicultural/bilingual programs. Bilingual and bidialectical balance tests to be used in measuring the language ability of linguistically different children are under development at the Stanford Center for Research and Development in Teaching (Stanford, California). The completed package of test materials will include instruments to measure teacher attitudes towards linguistically different students. Criterion-referenced tests have been the focus of research and development at the Southwestern Cooperative Educational Laboratory SWCEL (Albuquerque, New Mexico) and the Center for the Study of Evaluation CSE (los Angeles, California). SOBAR-Espanol is a criterion-referenced measurement system for assessing reading in Spanish developed at CSE. The SWCEL Performance Objective Package is designed to assess the cognitive, affective, and psychomotor development of children.

Staff development.–Several NIE products are targeted to expanding teacher awareness of the learning styles of culturally and/or linguistically different pupils and to help teachers identify instructional approaches appropriate for these students. The Far West Laboratory for Educational Research and Development (San Francisco, California) has produced a teacher training unit that seeks to enhance teachers' multicultural awareness and interaction skills. The Alaska Satellite Demonstration project has produced inservice training programs appropriate for rural Alaskan teachers. Similarly, the Bilingual Early Childhood Program has developed training materials for both preservice and inservice teachers working with Spanish-speaking students. While many of these curriculum and training materials are completed and are currently being disseminated across a wide range of sites, others are still being field tested.

The following section provides descriptions of the various NIE-supported products that are specifically designed to enhance the educational achievement of the many ethno-linguistic minorities in the country.

TEACHER INSERVICE TRAINING PROGRAM (PART OF ALASKA SATELLITE DEMONSTRATION PROJECT)

A series of video programs which provides information on teaching techniques for teachers in rural Alaska

The *Teacher In-Service Training Program* consists of 32 video programs, each approximately 20-30 minutes long. The series includes five segments of Rudolph Dreikurs' lecture series "Motivating Children To Learn." The remaining programs in the series consist of instudio discussion on various aspects of education in Alaska, involving an oncamera hostess, guests, teachers, and slide presentations.

This program series provides information on teaching techniques relevant to rural Alaskan teachers. Video presentation of these materials was chosen as the best means of wide distribution to teachers in isolated rural Alaskan communities.

Implementation of this program series requires teacher viewing of the video programs for possible implementation of described teaching techniques as they apply to each individual teacher's needs and resources.

Sample Lesson

The hostess introduces three teachers from the Juneau school system who are planning a 2-day "Days of '98" camping experience for an 8th-grade social studies class. Their idea is to simulate a town of 1898, with laws, hard working conditions, and inflated prices. The students arrive at the camp as "immigrants" who must find jobs to earn enough in the currency of the camp to pay for their meals and a place to stay, all the while dealing with the established laws and "authorities" of the town. Slides are shown of the teachers and class discussing the idea of the camp. The hostess then interviews two students after the camp is over for their reactions and experiences. Slides of the camp in operation are shown and explained. The three teachers then return, after the camp has taken place, to discuss their reactions to the experience with the hostess.

SUBJECT AREA(S)

Using community resources in the school, Alaska multimedia education, open classrooms, and special education are the subject areas.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are elementary, secondary, and administrative educators in rural Alaska.

GOAL(S) OR PURPOSE(S)

The goal of the program is to distribute information on teaching techniques relevant to educators in rural Alaska.

PATTERNS OF USE

The series can be seen in any order.

ASSESSMENT PROVISIONS

No formal evaluation procedures for the series have been implemented. As originally broadcast via satellite, each program included time for interaction via radio between program host and/or guests and village viewers. This feedback and viewer suggestion were directly responsible for selection of some of the subsequent program content.

TIME REQUIREMENTS

Each of the 32 programs is less than 30 minutes. If the program were viewed once a week, the program series could be seen in 32 weeks.

IMPLEMENTATION PROCEDURES

Use of the series requires a program video tape cassette, video tape recorder, and television monitor situated in a room suitable for accommodating viewers.

Summary Cost Information

Cost to implement this program series consists of the original purchase price of a video tape recorder and television monitor. Installation of video equipment requires no special technical knowledge or additional cost. Distribution of the video tape cassettes will be on a circulating basis, upon request, and at no cost to users. By supplying the distributor with blank video tape cassettes, the user could acquire the video tape series permanently, at no additional cost.

ASSURANCES AND CLAIMS

The series provides a variety of teaching techniques based on both educational theories and actual experiences of teachers in Alaska. The series was designed with the recommendations of a task force with representatives from a wide variety of educational organizations in Alaska.

The developers and producers have not received any reports of harm associated with the use of this product. Every effort is made to eliminate any form of social bias, ethnic or sexual stereotypes, or inappropriateness of content.

This series can be used effectively in rural areas with specified video tape equipment without developer assistance of any kind.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program video tape cassette	1 per viewing			
Video tape recorder	1 per viewing	1,500.00	5 years	Any commercial supplier
TV monitor	1 per viewing audience	600.00	5 years	Any commercial supplier

DEVELOPER/AUTHOR:

Office of Telecommunications
State of Alaska
Pouch AC
Juneau, Alaska 99801

Charles M. Northrip, Satellite Experiment Coordinator

AVAILABILITY

The complete 32-program series will be available for distribution on video tape cassettes in summer 1975 from:

Alaska State Library
Pouch G
Juneau, Alaska 99801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 002

ALASKA NATIVE MAGAZINE PROGRAM (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)

A series of video programs, each designed around a specific topic, relevant to Alaska's adult Native population

The *Alaska Native Magazine Program* consists of thirty-two 60-minute video programs. Each program is designed around a specific topic currently relevant to Alaska's adult Native population. A Native Alaskan program host combines commentary, instudio interviews, and taped excerpts filmed on location throughout the State, as well as news of activities, events, and people from Alaskan villages.

Alaska Native Magazine Program is an experiment in developing informative and relevant discussion on topics uniquely of interest to rural adult Native Alaskans, television programing which is not otherwise available to the widely scattered and culturally diverse target population.

SUBJECT AREA(S)

Subject areas include Native land claims, consumer information and protection; pipeline impact; white/nonwhite cooperation; limited entry fisheries; rights and responsibilities; education in rural Alaska; native corporations; and changes in Alaska.

INTENDED USERS AND BENEFICIARIES

The intended users are adult Native Alaskans living in rural communities and villages.

GOAL(S) OR PURPOSE(S)

The major goals of the program are: (1) To communicate to the village people changes in Alaska as they happen; (2) to document and record the processes by which change is occurring; and (3) to film Native Alaskans involved in the change—by so doing, to inform, educate, and entertain.

PATTERNS OF USE

The programs can be presented in any order.

ASSESSMENT PROVISIONS

No formal evaluation procedures for the program have been implemented. As originally broadcast live via satellite, each program included time for interaction via radio between program host and/or guests and village viewers. This feedback and current viewer evaluation were directly responsible for selection of subsequent program content.

TIME REQUIREMENTS

Each of the 32 programs is 60 minutes in length. Viewed once a week, the program series could be seen in 32 weeks.

IMPLEMENTATION PROCEDURES

Use of the program series requires a program video tape cassette, video tape recorder, and TV monitor, situated in a room suitable for accommodating viewers.

Summary Cost Information

Cost to implement this program series consists of the original purchase price of a video tape recorder and TV monitor. Installation of video equipment requires no special technical knowledge or additional cost. Distribution of the video tape cassettes will be on a circulating basis upon request and at no cost to users. By supplying the distributor with blank video tape cassettes, the user could acquire the video taped series permanently, at no additional cost.

ASSURANCES AND CLAIMS

This program series provides indepth discussion by Native Alaskans about topics suggested by and of importance to Native Alaskans in rural communities. The series was designed with the advice and approval of a consumer committee made up of representatives from Native Alaskan regional corporations. Original satellite telecasting allowed the program to be directly responsible to viewer questions, reactions, and interest in selecting subsequent subject matter (via radio interaction during live broadcast). Extensive on-location filming assures that views and lifestyles of Alaska's culturally diverse Natives are well represented.

In both intent and format, the program series respects and promotes the complex and unique ways of life of all the various Native cultures in the State.

While timely and current as originally broadcast, reproduction of this series will include some dated news material as well as subjects whose timely interest may be less than current. On overview, however, the series provides detailed and valuable material on basic issues that remain of interest to Native Alaskans.

The developers and producers have not received any reports of harm associated with the use of this product.

Every effort is made to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

This video tape series can be used effectively in rural areas with specified video tape equipment without developer assistance of any kind.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program video tape cassette	1 per viewing			
Video tape recorder	1 per viewing	1,500.00	5 years	Any commercial supplier
TV monitor	1 per viewing audience	600.00	5 years	Any commercial supplier

DEVELOPER/AUTHOR:

Office of Telecommunications
State of Alaska
Pouch AC
Juneau, Alaska 99801

AVAILABILITY

The complete 32-program series will be available for distribution on video tape cassettes in summer 1975. Order from:

Alaska State Library
Pouch G
Juneau, Alaska 99801

INFORMATION CURRENT AS OF MARCH 1975 ■

HEALTH EDUCATION PROGRAM (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)

A series of video programs, modeled after "Sesame Street," which gives attention to the health problems of 8- to 10-year-old Alaskan children

The *Health Education Program* consists of thirty-two 3-minute video programs giving special attention to the health problems of 8- to 10-year-old children living in Alaskan villages. Entitled "Right On!" the series gives health lessons in the style of "Sesame Street." The main characters in these programs are a Native woman acting as a health aide, and a "not-so-smart" moose and a "sharp" beaver puppet. The action takes place in a set resembling a health aide's office in a rural Alaskan village. Other puppets illustrate different health concepts.

For each program in the series, the classroom teacher prepares the students with discussion of the subject matter of the program to be seen, as suggested in the teacher's manual. After viewing the program, the teacher conducts discussion and/or activity with students to reemphasize the health concept of the program.

The student participates in previewing discussion, actual viewing of the video tape program, and followup discussion and/or activity based on the program's health topic and its unique application to life in rural Alaska.

Sample Lesson

The lesson on "Environment and Clothing" begins with a classroom discussion of the different types of clothing worn by the students in different seasons of summer and winter. The students list these examples on the blackboard. Afterwards, they watch the video tape program. In this program, the main puppet characters, Rex Moose and Charlie Beaver, discover how their clothing is especially suited to life in Alaska. After viewing, the students again refer to the blackboard list, select four articles of clothing from the winter list, and write an explanation of how each article helps to protect them from illness.

SUBJECT AREA(S)

Health education.

Subject areas include personal hygiene and health habits, frostbite and cold weather hazards, germs, disease, nutrition, dental health, physical fitness, individual differences, and family life.

INTENDED USERS AND BENEFICIARIES

Intended users are 8- to 10-year-old children living in rural Alaska.

GOAL(S) OR PURPOSE(S)

The overall goal of this series is to emphasize to the viewing audience of students the importance of everyday health in their lives and to help them become aware of the kinds of health problems in Alaska.

PATTERNS OF USE

Programs may be presented in any order. The series would be most effective when used in conjunction with classroom discussion and activity, but each program by itself is instructive in health education as it relates to rural Alaskan students.

ASSESSMENT PROVISIONS

Evaluation is left to the individual teachers, with the suggestion that evaluations be based on both the program's detailed objectives (listed in the teacher's manual) and the teacher's own objectives for the students.

TIME REQUIREMENTS

The 32 video programs in this series are under 30 minutes each. (Originally designed for satellite transmission, each program allowed for 10-15 minutes of live audio interaction with viewing villages and students. This portion of each program will not be included in video tape reproductions of the series.) If one program is viewed each week, the entire series could be seen in 32 weeks.

IMPLEMENTATION PROCEDURES

Use of the series requires a program video tape cassette, a video tape recorder, and a TV monitor, situated in a room suitable for accommodating viewers. The program will be most effective if shown to a standard classroom number of students and not a larger group. The teacher's manual developed with the series and a teacher to implement the discussion and activity suggestions are also necessary for full effectiveness of the series.

Summary Cost Information

Cost to implement this program series consists of the original purchase price of a video tape recorder and a TV monitor. Installation of video equipment requires no special technical knowledge or additional cost. Distribution of the video tape cassettes and the teacher's manual will be on a circulating basis from the distributor, at no cost to users. By supplying the distributor with blank video tape cassettes, the user could acquire the video taped series permanently at no additional cost.

ASSURANCES AND CLAIMS

The *Health Education Program* has been produced on an experimental basis to provide informative and entertaining television programing specifically designed to educate rural Alaskan children about good health habits. Emphasis in this series is placed on making settings, content, and characters relevant and understandable to the target group. The Alaska Area Native Health Service and a consumer committee consisting of representatives of Native villages, the Alaska Federation of Natives, and various State agencies joined as policy committees and advisers to assure that the health series did respond to Native Alaskans' needs.

The original program design was based on its use as live satellite transmission to rural Alaska. The last 10-15 minutes of each program allowed for live interaction, via radio, between the program host and the viewing village students. Actual participation by students increases their involvement and empathy with the show's characters. This portion of each program will not be reproduced with the video tape cassettes for distribution, and each program will be less than 30 minutes in length. Originally, each program unit also included a second lesson, a film produced outside Alaska that reinforced the health principles of the first lesson. Only one-time rights to these films were purchased for satellite broadcast, and they will not be available on video tape cassettes. While this lack of interaction and film followup may decrease the intended effectiveness of the series, additional discussion and activity initiated by the classroom teacher should be sufficient for maximum series impact.

The developers and producers have not received any reports of harm associated with the use of this product. Every effort is made to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

This video tape series, accompanied by a teacher's manual, can be used effectively in rural areas with specified video tape equipment without developer assistance of any kind.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program video tape cassette	1 per viewing			
Video tape recorder	1 per viewing	1,500.00	5 years	Any commercial supplier
TV monitor	1 per viewing	600.00	5 years	Any commercial supplier
Teacher's manual	1 per teacher		Reusable	

DEVELOPER/AUTHOR:

Office of Telecommunications
State of Alaska
Pouch AC
Juneau, Alaska 99801

AVAILABILITY

The complete 32-program series will be available for distribution on video tape cassettes in summer 1975. Order from:

Alaska State Library
Pouch G
Juneau, Alaska 99801

INFORMATION CURRENT AS OF MARCH 1975 ■

BASIC ORAL LANGUAGE DEVELOPMENT PROGRAM (BOLD) (PART OF THE ALASKA SATELLITE DEMONSTRATION PROJECT)

A series of video programs designed specifically to meet the language arts needs of 5- to 7-year-old native Alaskan children

The *Basic Oral Language Development Program* (BOLD) consists of thirty-two 30-minute video programs designed specifically to meet the language arts needs of 5- to 7-year-old native, rural Alaskan children whose first language is not English, and/or whose English is limited to the rudimentary needs of the home and classroom. This video series, entitled "Amy and the Astros," is set inside a spaceship. An English-speaking Alaskan woman, Amy, and a robot named Rod Dod informally teach English to two puppet "Astro" children who have come to Alaska from outer space.

This choice of program design is based on the theory that the Astro children can demonstrate the characteristics of all children, without reference to any particular Alaskan culture that might seem to exclude others. By involving the viewing audience in "teaching" the Astro children English, the students become involved with the show and its characters while they themselves are being taught. Also, the need for the Astro children to learn English makes possible a comprehensive, sequential program of oral language development.

The classroom teacher, with the aid of a teacher's manual, leads the class in a 5-day teaching sequence centered around each program in the series. Each of the 5-day lessons is 30 minutes in length. On the first and second days, the teacher leads the class in previewing activities; the video program is seen on the third day, followed by postviewing activities on the fourth day and evaluation on the fifth day.

The student participates in the 5-day sequence of previewing activities, viewing of the video program, and postviewing activities.

Sample Lesson

(Third lesson in 5-day series)

Prior to viewing the video program on the third day of the lesson sequence the teacher suggests to the class that they listen for the words "feather," "ptarmigan," and "dog," look to see some birds that live in Alaska, and listen to hear a plane or snowmobile. The children and teacher then watch the video lesson. As the program begins, the Astro children are coloring and carrying on a simple dialog: "I want the red crayon." "Where's the orange crayon?" The robot Rod Dod enters and helps them with the colors, as yellow and red blend into orange on the video screen. One of the Astro children has drawn a picture of an Alaskan flag, and they all recite the Alaskan pledge, which is repeated throughout the series. Amy enters the set and together they look at pictures of birds. Zeon and Tora, the Astro children, try to identify the birds, but make mistakes; and Rod Dod and Amy help them. They especially have trouble with "an" eagle. Amy takes an orange out of her bag for practice with the use of "an" and the color "orange." Then they practice numbers and colors with the use of six feathers. The sound of a train introduces a picture of a train for the children to identify, followed by the sound and picture of a plane, bell, cat, clock, bird, and dog. "Listen! What do you hear? Look! What do you see?" The show concludes with the singing of "Listen and Look," a song used throughout the series. After viewing, the teacher leads the class in exercises based on the material in the program. "What can you hear in Alaska? Can you hear a bird, a plane, the snow, the wind? What can you hear at night? Can you hear the dogs, the dark, the school bell? What can you hear in Alaska?"

SUBJECT AREA(S)

Grammar, basic sentence patterns, expansion of the noun phrase, tense and verb construction, inflections, function words, and concepts and mental processes

INTENDED USERS AND BENEFICIARIES

Intended users are 5- to 7-year-old children in rural Alaska.

RD 110 004

GOAL(S) OR PURPOSE(S)

To help students: (1) To improve and develop the oral language skills necessary to communicate effectively in English; (2) to develop a good foundation of oral language proficiency upon which to base future successful achievement in reading, writing, and the more complex processes of thinking, such as concept formation, problem solving, and abstract reasoning; and (3) to further develop an understanding of a different (English-speaking) culture and be able to appreciate it and function within it without losing personal identity and respect for their own culture.

Two major purposes of this program series are also (1) to assist teachers to help children develop good oral English and, at the same time, (2) to demonstrate techniques to improve their teaching abilities for oral language.

PATTERNS OF USE

Lesson units are sequential and cumulative and should be used in consecutive order.

ASSESSMENT PROVISIONS

Evaluation is left to the individual teachers, with the suggestion that evaluations be based on both the program's detailed objectives (listed in the teacher's manual) and the teacher's own objectives for the students.

TIME REQUIREMENTS

The 32 video programs in this series are under 30 minutes each. (Originally designed for satellite transmission, each program allowed 10-15 minutes for live audiointeraction with the viewing students from the villages. This portion of each program will not be included in video tape reproductions of the series.) Using the project design of a 5-day teaching sequence centered around each video program, the entire series could be seen in 32 weeks.

IMPLEMENTATION PROCEDURES

Use of BOLD requires a video tape program cassette, video tape recorder, and television monitor, situated in a room suitable for accommodating viewers. The programs will be most effective if shown to a standard classroom number of students, and not a larger group. The teacher's manual, developed with the series, and a teacher to implement the discussion and activity suggestions are also necessary for full effectiveness of the series.

ASSURANCES AND CLAIMS

The grammatical points have been carefully selected and sequenced to allow for gradual introduction, constant reinforcement, and eventual mastery. The lessons concentrate on learning a new language pattern well, building on what the children know and have learned in previous lessons, and providing for constant review. However, the vocabulary for which the children may be held accountable is limited.

To help insure that this program series meets the needs of rural Alaskan children, a consumer committee consisting of representatives from rural Alaskan villages, the Alaska Federation of Natives, and Alaskan education and health agencies actively contributed to review and approval of program designs from their inception to actual program production. Every effort was made to represent the various Native Alaskan cultures with authenticity and sincerity, through use of artifacts, pictures, and story line relevant and recognizable to the target population.

The original program design was based on its use as live satellite transmission to rural Alaska. The last 10-15 minutes of each program allowed for live interaction, via radio, between the program host(ess) and the viewing village students. Actual participation by students increases their involvement and empathy with the show's characters. This portion of each program will not be reproduced on the video tape cassettes for distribution, and each program will be less than 30 minutes in length. While this lack of interaction may decrease the intended effectiveness of the series, additional discussion and activity initiated by the classroom teacher should be sufficient for maximum series impact.

The developers and producers have not received any reports of harm associated with the use of this product. Every effort is made to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

This video tape series, accompanied by a teacher's manual, can be used effectively in rural areas with specified video tape equipment without developer assistance of any kind.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program video tape cassette	1 per viewing			
Video tape recorder	1 per viewing	1,500.00	5 years	Any commercial supplier
TV monitor	1 per viewing audience	600.00	5 years	Any commercial supplier
Teacher's manual	1 per teacher		Reusable	

DEVELOPER/AUTHOR:

Office of Telecommunications
State of Alaska
Pouch AC
Juneau, Alaska 99801

AVAILABILITY

The complete 32-program series will be available for distribution on video tape cassettes in summer 1975 from:

Alaska State Library
Pouch G
Juneau, Alaska 99801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 005

ALASKAN READERS (ALASKAN READING AND LANGUAGE DEVELOPMENT PROGRAM)

A comprehensive program for use with rural Alaskan children, grades 1-3, who speak English as a second language

The *Alaskan Readers* are a comprehensive reading and language development program for grades 1 through 3. More than 80 items are included in the set of materials.

Many rural (Native) Alaskan children speak English as a second language. They come to school with limited facility in English and with concepts and real-life experiences restricted to their village or region. According to an assessment by the Alaska State Department of Education, they needed a reading and language development system specifically designed for them. It would support their native cultures, be based on their conceptual and language readiness, and provide for successful reinforcing of language experiences.

The materials were designed to provide an integrated language arts experience and provide gradual introduction of vocabulary and "outside" concepts so that children were always introduced to the broader outside concepts with sufficient learning experiences to assure understanding and success.

This instructional series is self-contained and has all the components of a basic reading and language arts series including manuals, texts, workbooks, and supplementary materials. Messages to parents are provided so that they can understand the purposes of the program.

The learner participates in oral and written language epxerience, enriched by special materials such as Benjamin Beaver's Box, an oral language development kit. The decoding system is semilinguistic and is designed as the Graphonemes, a system of recognition of stable syllables in the English language, copyrighted by Virginia Jones Benedict.

SUBJECT AREA(S)

The subject areas are: elementary language arts—reading, speaking, listening, writing, and spelling.

INTENDED USERS AND BENEFICIARIES

The intended users are primary children of native extraction living in rural Alaskan villages.

GOAL(S) OR PURPOSE(S)

This program was designed to help Alaskan Native children: (1) Improve their abilities to communicate verbally in the English language, (2) learn to write and to spell effectively, (3) develop an ever-increasing ability to work independently in furthering communication skills, (4) be able to identify with characters and settings employed in the instructional media, (5) expand their concepts, (6) increase their pride in their native heritage, (7) develop pride in being part of the American heritage, (8) proceed in their learning at individual rates, (9) have readiness experience for each specific task at hand, (10) help them to learn language arts skills as an integrated whole, (11) develop thinking skills at increasing levels of competence, and (12) learn to assess their own progress. These goals are supported by more than 70 specific measurable objectives.

PATTERNS OF USE

The materials are used as a complete reading and language development program. The materials are sequenced into 11 levels extending over grades 1 through 3. Sequential use is essential.

ASSESSMENT PROVISIONS

At each of the 11 levels, an inventory is provided which diagnostically assesses the progress made by each pupil at that level. The teacher's guide provides suggestions for remediation and pacing of pupils according to their needs.

TIME REQUIREMENTS

Daily basic instruction is required. It is recommended that each primary child have not less than 20 minutes' reading instruction each morning and afternoon (40 minutes daily) in addition to many integrated language arts experiences throughout the day.

IMPLEMENTATION PROCEDURES

Teacher-training sessions of 2 days are recommended. A teacher-training kit has been prepared for this program.

Although a teacher-training workshop is recommended, it is not essential. Many teachers are using the program effectively without having experienced a workshop.

ASSURANCES AND CLAIMS

Assurances

The materials have been judged by Alaskan Natives and others to enhance self-image and cultural pride without reducing respect for others. The materials are not psychologically harmful.

Claims

A 3-year field test was conducted in Alaska with more than 200 subjects. While rigid controls were not possible, evidence was gathered that supported the attainment of most objectives.

An evaluation committee consisting of multiagency representatives in Alaska reviewed all evidence in 1972 and issued this statement: "This Evaluation Committee, having examined the history of the *Alaskan Reading and Language Development Program*, the needs upon which the program was based, and the data available regarding the achievement of the program, finds that the program comes closer than any other to providing culturally and conceptually relevant materials and that the program is effective when used well and when adapted to the needs of the children."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Alaskan Readers				
Reading and language resource book, vol. I	1 per teacher	4.95	Reusable	
Teacher's Manual for each level	1 per teacher	7.00	Reusable	
Reading texts for each level	1 set per pupil	1.25-4.00	Reusable	
Workbooks to accompany each level	1 set per pupil	3.00	Consumable	
Supplementary materials:				
Holiday resource booklet	1 per room	8.00	Reusable	
Legend cards	1 per room	2.60	Reusable	
Benjamin Beaver's Box (materials, supplies)	1 per 1st grade	50.00	Consumable	

Note: Additional materials include alphabet cards, inventories, tapes, transparencies, word cards, and object cards.

DEVELOPER/AUTHOR:

**Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204**

**Virginia Jones Benedict, Chief Developer
Norman K. Hamilton, Director of the Division of Curriculum Development Programs**

AVAILABILITY

**The *Alaskan Readers* were copyrighted in 1972, and copyright is held by the Northwest Regional Educational Laboratory. It is available from:
Eskimo, Indian, Aleut Printing Co., Inc.
P.O. Box 1287
Fairbanks, Alaska 99707**

RD 110 006

COMMUNICATION ARTS PROGRAM I
(CAP I)

An educational system to advance the communication arts of 3- to 9-year-old children from minority backgrounds

The *Communication Arts Program I* (CAP I) is an educational system consisting of five components:

1. Oral Language Program (OLP)—sequentially presented classroom lessons with teaching strategies, providing non-English-speaking children, or those with a minimal command of English, with an adequate facility in English.

2. Reinforced Readiness Requisites (RRR) Program—classroom lessons providing learning readiness competencies through application of a system of motivational strategies.

3. Cross-Cultural Communication Program—aids the teacher in communicating with adults and children from minority backgrounds. Emphasized are the nonverbal, informal aspects of Southwestern Cooperative Educational Laboratory's (SWCEL's) CAP components. It helps the teachers understand and accept standards, values, and behaviors differing from their own so culturally relevant materials will have more meaning in the classroom. The training is directed toward developing verbal and nonverbal communication skills.

4. Teacher/Teacher Aide Companionship Training Program—5 day preservice training institute for teachers and aides employing a team approach to classroom tasks and covering the philosophy, techniques, and methods of the OLP and/or RRR program to be installed.

5. Quality Assurance Specialist (QAS) Program—provides program accountability via training of local education agency teacher(s) as specialists performing overall monitoring, conducting monthly classroom observations, providing periodic inservice training, and serving as SWCEL/local enforcement agency (LEA) liaison.

In addition, the laboratory has a testing and evaluation program, which provides for administration, scoring, and processing of pretests and posttests, supplemented by periodic content tests and for training of local education staff to conduct testing and scoring procedures. Processing is always performed by the laboratory. The SWCEL pretests and posttests provide quantitative gain scores, and the criterion-referenced content tests are combined with the quality assurance specalist's monthly reports for process evaluation to furnish data for the detection of random behavior and the reinforcement of positive behavior.

SUBJECT AREA(S)

Subject areas include:

1. Oral Language Program (OLP)—150 sequential lessons with teaching strategies in a sequence determined by linguistic and language learning theory. Lessons are divided into areas of structure and pronunciation.

2. Reinforced Readiness Requisites (RRR) Program—145 lessons providing prereading skills taught in the context of a system of reward strategies designed to install self-motivation in preschool and 1st-grade children.

3. Cross-Cultural Communication Program—Instruction for teachers in establishing communication with adults and children from minority backgrounds. Standards, values, and behaviors differing from teachers' own are presented in order that culturally relevant materials will have meaning and place for the teacher in the classroom.

4. Teacher/Teacher Aide Companionship Training Program—Team training program for teachers and aides, training aides to assume instructional tasks. Instruction centers about classroom experience-centers approach and development (by the teachers and aides) of learning objectives appropriate to the needs of the students of the teachers and aides being trained.

5. Quality Assurance Specialist (QAS) Program—Training for local enforcement agency (LEA) employee(s) to monitor SWCEL programs and assist LEA teachers and administrators to assure program accountability. Training consists of techniques for classroom observation, the conduct of inservice meetings, techniques for recording observations and providing overall guidance to teachers using SWCEL programs, and procedures for serving as local contact between LEA and program developers.

INTENDED USERS AND BENEFICIARIES

The intended product users are elementary school teachers, elementary schoolteacher aides, elementary school administrators, and parents for use with children 3 to 9 years of age from low socioeconomic levels and/or from families and homes of other than English-speaking origins.

The intended beneficiaries include all school districts and classrooms where there are 3- to 9-year-old students meeting difficulty in the classroom because of little or no command of the English language. These may be children of either sex and any social or national origin, locale, or income level.

GOAL(S) OR PURPOSE(S)

The broad goal of CAP I is to advance the communication arts of 3- to 9-year-old children from minority backgrounds, thereby improving the early educational opportunities of this target group. The individual program goals are as follows:

1. Oral language program objectives: To provide non-English-speaking children (or those children with a minimal command of the English language) with an adequate facility in English such that these children will be able to function in school programs conducted in English.
2. Reinforced readiness requisites objectives: (a) To increase children's ability to defer rewards in the education setting, (b) to make reinforcement integral to academic tasks, (c) to increase teachers' effectiveness in shaping and maintaining desirable behavior among their pupils, and (d) to devise an instructional program that will provide kindergarten and 1st-grade children with readiness competencies that are prerequisites for successful school achievement.
3. Cross-Cultural Communication Program Objectives: To aid in development of teachers' verbal and nonverbal skills in communicating with adults and children from minority backgrounds.
4. Teacher/Teacher Aide Companionship Training Program Objectives: (a) To train teachers and teacher aides to function as a classroom team and (b) to achieve teacher/aide interaction and sharing of complementary instructional roles within the framework of the SWCEL program.
5. Quality assurance specialist program objectives: (a) To provide training for local education agency employee(s) to serve as monitor(s) and resident "specialist" for SWCEL programs and materials and (b) to maintain ongoing accountability for SWCEL programs by establishing lines of communication between SWCEL and the LEA to be used as needed.

PATTERNS OF USE

The Oral Language Program is designed to be used daily by 1 teacher (or aide) with groups of up to 10 children from ages 5 to 7. Each lesson is approximately 25 minutes long, although the teacher encourages the children to use sentence patterns learned in the lesson during the rest of the day. The lessons deal entirely with oral and auditory aspects of English; there is no instruction in either reading or writing contained in the program. The lessons generally deal with only one style of English—an informal version of the standard dialect. The OLP attempts to provide pupils with enough experience in English so that they will be able to grasp new utterances and situations successfully. Games, physical activities, dialogs, pictures, and other stimuli support the language being taught and capitalize on the kinds of behavior in which 5- to 7-year-olds are likely to engage. Question asking and answering routines appear commonly throughout the lessons.

In the Reinforced Readiness Requisites Program, three phases have been designed to increase the child's motivation. In the first phase, tangible rewards are used to motivate and sustain desired behavior. Before a lesson is completed, the teacher gives a reward based on acceptable group performance. Subsequent to the first week, rewards are given on alternate days. Rewards are always given on the basis of group performance rather than individual achievement. During phase 2, tokens provide the essential link in moving the children from immediate to delayed rewards. Tokens are material objects, such as poker chips, which assume reinforcing power through exchange for backup rewards, such as toys. These tokens are administered either daily or on alternate days for acceptable group performance and redeemed initially at the end of either a 1-week or 2-week period for a duration of 9 weeks. In the final phase, extending over 12 weeks, tangible rewards are gradually withdrawn. Tokens and backup rewards are progressively tapered off until the desired performance is maintained through the child's own motivation and the teacher's conventional praise and approval. By the time the youngsters have completed the program (generally 1 year in duration), they no longer need outside tangible sources of motivation to maintain their performance.

In the Cross-Cultural Communication Program, instructional techniques include lecture, simulation, and role playing. Media is an integral ingredient and is used to build the teacher's awareness of cultural differences as well as the importance of verbal and nonverbal communication. Media presentations involve group participation and followup. Video tape equipment is utilized so that teachers may observe monitor playback of their performances.

The Teacher/Teacher Aide Companionship Training Program emphasizes the involvement of both members of the team in the instructional process. During institutes, the teacher aide receives general instruction in the characteristics and learning styles of primary-level children, the role of the teacher aide in school-community relations, an awareness that there may be differences between the school and home environments, and the respective roles of the teacher and aide in the classroom. Specific instruction is given in supplementing the teaching of English as a second language. Both teachers and aides participate in microteaching sessions. In these exercises, each person can see and evaluate individual classroom performance through the use of video tape playback on television monitors.

The quality assurance specialist has three major tasks: (1) To provide general coordination of laboratory programs and teacher efforts, (2) to provide continuing education through presentation of inservice meetings, and (3) to monitor teacher and student behaviors to assure that they fall within the program's specified tolerance levels. The QAS employs several devices to determine and maintain correct teacher behavior including classroom observation, inservice meetings, the answering of questions, and other evaluation techniques. The specialist also must be able to interpret and explain to teachers and administrative personnel all the tests and assessment devices used with SWCEL programs.

ASSESSMENT PROVISIONS

The Oral Language Program testing assesses the performance of children as speakers of English by eliciting their verbal responses and measures aspects of vocabulary, pronunciation, and syntactic construction. The test can be used by teachers to group children according to language ability, and the teacher is taught to use this information appropriately. Administrators can use test results to determine whether a language program is necessary and what percentage of the population should participate. Six content tests measure progress and assist the quality assurance specialist and teacher to guide the progress of the program effectively. The teacher scores the tests, thus obtaining immediate feedback for determining need for review. The posttest determines progress at the end of the school year.

The Reinforced Readiness Requisites criterion test establishes the beginning and terminal behavior of the children and knowledge of the concepts to be covered; the six intermediate retention tests not only measure progress but are a device in the program for helping the child to work for no reward.

SWCEL recommends that the local education agency utilize SWCEL's Process Evaluation Model which SWCEL performs using the classroom raw data to present a more exact analysis of program operation. A random sampling of the content tests is compared to the pretests, content scores, and the quality assurance specialist's reports of observation, and a process evaluation statistically comparing each school site and teacher and indicating the effectiveness of instruction is prepared. The Process Evaluation report is able to reflect delicate variations in program operation, and resultant data are then presented to the LEA and the QAS for their action.

It is of interest to note the high quality of the assessment component. Tests are administered to each child individually and separated from the classroom setting. Each response is tape recorded by testers, qualified only after a 1-week training session in test administration and scoring. (SWCEL will provide testers or LEA may opt for participation in a training institute for LEA staff members.)

TIME REQUIREMENTS

The time required to complete the individual programs is as follows:

1. OLP: 25 minutes per day for 150 lessons
2. RRR: 15 minutes per day for 145 lessons
3. Instructional personnel: One-time training for 1 week plus inservice meetings during the first year at the rate of one per month.

IMPLEMENTATION PROCEDURES

The *Communication Arts Program I* (CAP I) is extensively adaptable, adapting to local language, pacing of lessons to local environment, and adjusting to specific needs of the community (i.e., size of target population, use in local sites of previously trained teachers as assistant trainers, incorporation of local folkways and culture via SWCEL cultural relevancy materials, and adjustment of components recommended for a school district to correspond to the finances of the district).

The CAP I can be integrated within existing curriculum providing for minimal programmatic adjustment in the classroom.

SWCEL CAP I offers a complete system which provides the classroom materials and lessons, training for teachers and administrators, monitoring, testing, and evaluation. This provides the school district with an opportunity for accurate appraisal of overall costs; and the district the advantage of not being required to locate accessory items, personnel, and services. CAP I trains teachers and teacher aides to be effective language teachers in the primary school.

Unlike other similar products, the CAP I is not simply a set of workbooks and materials delivered to a teacher on the first day of school. The CAP I supplies the teacher with a training program which is not only thorough but ongoing throughout the school year.

Personnel Required for Product Adoption and Implementation

Personnel costs are an extremely flexible item. No new or additional personnel are required for the LEA. Training is included as an integral part of the product whenever the CAP I or components are installed. The required 1-week (one-time) training for the teachers, testers, and quality assurance specialist may involve some additional salary expenditure by the LEA.

ASSURANCES AND CLAIMS

A summative evaluation of the *Communication Arts Program I* contracted by SWCEL was conducted in November 1971 by impartial evaluators from outside the laboratory. This evaluation considered the needs and imperatives of the potential program users and was directed toward judgments of accomplishment of program objectives from the viewpoint of the classroom teacher and school administrator.

This evaluation report found that the OLP served as a useful technique for teaching English as a second language. OLP pupils showed more verbal facility than pupils without the program in previous years. All classes showed gains from pretest to posttest, and the lowest mean class gain reported compared favorably with that of non-OLP pupils reported the previous year. Based upon the sample, the

OLP was determined to be a technique which is acceptable to teachers. Students demonstrate improvement in subject areas other than English and displayed increased interest in schoolwork in general. Gains were noted in pupils' self concept, ease in classroom, cooperation with others, attentiveness, and listening ability. The product effect upon teachers improved their relationships with the students and increased sensitivity to and awareness of language problems.

In Oklahoma, the Oral Language Program, the Reinforced Readiness Requisites Program, and the Teacher/Teacher Aide Program of the *Communication Arts Program I* were installed in 1969 in 10 school districts where native American school-age population ranges from 10 to 60 percent of the total school-age population. After 2 years an evaluative report was prepared on use of the Oral Language Program and Reinforced Readiness Requisites and other CAP I components used with lower primary and preschool children from predominantly low-income Cherokee and Anglo homes. This report concluded that the product had met its objectives and that significant improvement in student ability and learner gains for 350 children had been achieved.

The entire development of the SWCEL products and CAP I was pointed toward alleviation, if not elimination, of the social handicaps often connected with the sexual, racial, religious, or socioeconomic stereotyping of an individual student. Teachers and administrators, through a cultural awareness component, are made aware of the various biases present in human relationships and of communication techniques and methods to decrease their impact, while broadening the teachers' understanding and knowledge of other cultures.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
OLP classroom kit, 150 lessons, pictures, realia, puppets	1 per classroom	175.00	Reusable	
RRR classroom kit, 3 teacher's manuals, realia, stimulus cards	1 per classroom	150.00 initially, 75.00 for replacement set of realia	Realia yearly	
Teacher/teacher aide training (including RRR and/or OLP, CCC) 5-day training institute with microteaching techniques, manuals, teach/reteach method with VTR review and analysis with live children	1 teacher or 1 teacher aide per classroom	300.00 per person or 500.00 per T/TA team	No training required 2d year	
QAS 5-day training institute, manual, record sheets	1 QAS per 1-10 teachers	200.00 per person	No training required 2d year	
Inservice rental of QAS kits (16) for 1 year	1 per school district	200.00	Same each year	
QAS maintenance service required for novice teacher/teacher aides for first 10, and $10 for each additional teacher	Per school	200.00	Same each year	
Testing, scoring, processing		18.00 per child	Same each year	
Scoring, processing		5.00 per child	Same each year	
Processing		3.25 per child	Same each year	

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

Copyright for the *Communication Arts Program I* is pending. The program is available from:
Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 007

SWRL ENGLISH LANGUAGE AND CONCEPTS PROGRAM FOR SPANISH-SPEAKING CHILDREN (LCS)

A performance-based program which teaches Spanish-speaking children, grades K-1 to communicate effectively in the English language

The *English Language and Concepts Program for Spanish-Speaking Children* (LCS) teaches Spanish-speaking children to communicate effectively in the English language. The performance-based program is generally used in kindergarten and 1st grade. It is designed to prepare children to enter the school's regular instructional program as quickly as possible. LCS materials and procedures enable the non-Spanish-speaking teacher to provide effective instruction appropriate to the needs of each pupil. Classroom activities provide experience using the vocabulary words, pronunciation, and grammatical structures necessary for effective communication, as well as frequent opportunities for strengthening newly learned language skills.

While cultural or environmental support for the program's learning activities is maintained through materials that reflect objects and experiences common to the Mexican-American culture, instruction in the program is presented in English only. The lessons have been developed to enable a teacher who does not speak Spanish to communicate with a child who speaks only Spanish.

LCS gives special attention to the development of communication skills needed in school and at home. Pupils learn to converse using the names of common classroom objects, household items, and activities involving food, shelter, pets, health, clothing, and family. They also acquire verbs which describe daily activities, such as sleeping and eating. In addition, they learn geographic terms, modes of transportation, monetary units, and vocabulary related to recreation and safety. Successful attainment of program outcomes helps to prepare pupils for future reading and writing in the subject matter areas of mathematics, science, and social studies.

LCS is organized into carefully sequenced instructional units. Each unit contains daily lessons, assessment activities, and review activities. Each daily lesson includes initial teacher-directed instruction and individual followup practice. The teacher begins the lesson with a short review of the concepts taught in the previous lesson. Following the review session, new concepts are introduced and pupils work together, practicing the skills they have learned. After teacher-directed instruction, an optional activity is suggested that promotes natural communication among pupils through enjoyable games. A followup practice session presented later can easily be conducted by the teacher, an aide, or a tutor.

SUBJECT AREA(S)

English language, conceptual skills and communication skills essential to the success of Spanish-speaking children in school, home, and social environments are the subject areas.

INTENDED USERS AND BENEFICIARIES

The program was developed for use with all Spanish-speaking children who have not yet attained its learning outcomes. Although the program's extensive testing has been done principally with kindergarten and 1st-grade children, LCS has also been used with older elementary schoolchildren.

LCS materials and procedures were designed to be used by a regular classroom teacher; it is not necessary that the teacher be a linguist. The instructional materials incorporate the required linguistic exercise in a manner easily managed by the classroom teacher.

GOAL(S) OR PURPOSE(S)

The program emphasizes the development of English language skills essential to success in reading and other formal instruction. The program is designed specifically for Spanish-speaking children who do not possess the repertoire required for entry into the school's regular basal reading program.

The structure of the program incorporates systematic attention to lexicon, phonology, and syntax. These linguistic constructions are sequenced to capitalize on the regularities and interrelations of both Spanish and English. The development of the program has included specific attention to insuring that instruction is flexible and manageable for teachers, and uncomplicated and appealing for pupils.

PATTERNS OF USE

LCS is organized into 15 instructional units. Each unit contains 15 daily lessons, assessment activities, and review activities. Each daily lesson includes 25 minutes of initial teacher-directed instruction and 25 minutes of followup practice. The teacher begins each lesson with a short review of the concepts taught in the previous lesson. Following the review session, new concepts are introduced, and pupils work together practicing skills they have learned. At the end of the teacher-directed instruction, an optional activity is suggested that promotes natural communication among pupils through enjoyable games. A followup practice session presented later easily can be conducted by the teacher, an aide, or a tutor.

The program includes options for utilization of upper-grade students or adult aides to assist the teacher with selected practice and maintenance activities. The materials and procedures necessary for the effective involvement of paraprofessionals in these instructional support roles are provided.

Such instructional support options enable a class to benefit from structured assistance consistent with both the program requirements and available human resources. Procedures for appropriate paraprofessional activities, the corresponding training materials, and followup procedures for tutor aide supervision are provided.

ASSESSMENT PROVISIONS

The LCS placement aid helps determine which children should participate in the program and the appropriate point of their entry.

Program assessment materials provide ongoing information regarding pupil learning and help identify those pupils who need supplementary instruction on program skills. Scheduling guidelines, regular assessment exercises, and individual achievement records are assessment-related components of the instructional program.

Additional assessment materials and procedures relate to: (1) Midyear and end-of-year pupil performance measures, (2) collection and reporting of performance and instructional scheduling information, (3) schoolwide sampling plan and data collection schedule, (4) data processing, (5) instructional decision rules for determining alternative courses of action, and (6) guidelines for evaluating program modifications.

The LCS program quality assurance (QA) system includes the resources to identify and report instructional accomplishments attained during program use. This information provides a basis for instructional planning by teachers and administrators. The system also provides a means by which the pupil proficiency attained with LCS can be credited in a manner that is understandable by parents and others interested in the schools.

TIME REQUIREMENTS

LCS is organized into 15 instructional units, each containing daily lessons, assessment activities, and review activities. The rate at which a pupil progresses through LCS depends upon the amount of instruction received per day and the point at which the program is entered. Generally each daily lesson requires 25 minutes of initial instruction and 25 minutes of followup practice. Classroom sets are packaged in two sections—units 1-8 and units 9-15. Each section contains sufficient materials to provide instruction for 1 year.

IMPLEMENTATION PROCEDURES

The training and installation system includes the resources that enable a school district to install LCS efficiently and effectively. For example, comprehensive materials and procedures are provided for training school supervisors to conduct program orientation sessions for teachers. A comprehensive, self-contained program used by supervisors in these training sessions is furnished. School-verified training materials and procedures enable district personnel to assume all responsibility for the teacher training required to begin using the program effectively and to conduct this training within the time conventionally available to school personnel. Materials are also provided for training tutors and aides in specific support skills.

Also within the installation system are materials containing suggestions for performing administrative functions related to LCS, such as conducting briefing sessions for school boards, parents, and community members; ordering and distributing materials; conducting followup training sessions for teachers; monitoring the operation of the program during the school year; and integrating the program with the existing school curriculum.

ASSURANCES AND CLAIMS

Assurances

The materials and procedures composing the product have been designed for convenient use by the teacher with no requirement for specialized personnel. During each of the 15 tryouts involving the aggregate of more than 550 classrooms and 11,000 pupils, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schema. Tryout inquiry procedures have served to assure teacher acceptability and product exportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance as related to compliance with extant codes in such areas as sexual stereotyping, cultural and racial diversity, dangerous substances, or religion.

Claims

Release of the product for commercial distribution requires demonstration that it has been used successfully to obtain prespecified program performance on each of the outcomes. The SWRL quality testing procedures for instructional products and the criteria against which the instructional product has been evaluated during development provide this evidence.

To provide a replicable means of insuring that the program continues to function reliably under natural school conditions apart from SWRL, a set of procedures referred to as "Quality Assurance" has been developed. As the tryout monitoring procedures did for SWRL staff during product development, the QA resources provide regular periodic information on various indicators of instructional accomplishment and program status for each class, school, and district. Such information provides school agencies with quantitative data relevant to program effectiveness and enables them to communicate instructional successes attained through program use to school boards, funding agencies, and other interested groups. Also, individual pupil accomplishments are easily identified and available for sharing with parents. This information has proven especially useful in furthering parent/school communication and in fostering parental support.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars		Replacement Rate and Cost	Source if Different from Distributor
		List price	*School Price*		
Resource kit including lesson cards, flashcards, assessment cards, dialog practice exercise cards, review cards, color concept cards, number concept cards, practice exercises, concept posters, puppet, LCS placement aid, quality assurance report guide, LCS unit record sheet, LCS tutorial record sheet, LCS teacher's manual, LCS coordinator's guide with audiotape script, LCS assessment booklet, LCS assessment guide	1 set per 15 pupils	265.33	199.00	Reusable	
Teacher training system including LCS materials and procedures (filmstrip, audiotape), LCS practice for tutors (filmstrip, audiotape), LCS materials and procedures for tutors or aides (audiotape), LCS coordinator's guide (with audiotape script)	1 set per school or district	53.26	39.95	Reusable	
LCS training film 16mm sound/full color	1 per school district	113.49	85.12	Reusable	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

The *SWRL English Language and Concepts Program for Spanish-Speaking Children* was copyrighted in 1974. It is currently available from:

American Book Co.
450 West 33d St.
New York, N.Y. 10001

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 008

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL I

A comprehensive learning system for 3-year-old Spanish-speaking children, their teachers, and parents

The *Bilingual Early Childhood Program* (BECP), *Level I*, is a comprehensive learning system for 3-year-old Spanish-speaking children, their teachers, and parents. It is part of a 3-year sequential early childhood program developed by the Southwest Educational Development Laboratory (SEDL). The three parts of the learning system are: Instructional materials, staff development, and parent involvement. The level I curriculum contains 25 instructional units which include 4 kinds of activities—visual, auditory, motor, and ideas and concepts (cognitive). The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes approximately 15 lessons and activities, teacher's guidebooks, materials and media for the activities, and curriculum-based unit and mastery tests. Each instructional unit centers around a single theme, such as "Body Awareness" or "Musical Instruments," and is designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. The program provides for relating the children's learning to their home situations through home activities and materials for use by parents. Staff development provides preservice and inservice training for teachers in the principles of classroom management, teaching strategies, effective use of materials and equipment, testing, and working with parents. The total package provides a comprehensive framework within which children can develop their skills and abilities in Spanish and in English. Parents can be involved in the educational process, and teachers can expand their teaching skills.

The *BECP, Level I*, is a developmental program concerned with the general cognitive, psychomotor, and affective stages common to all children. The activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the language of instruction for the first part of the program, and Spanish continues to be used throughout the program. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. Classroom arrangement and management are integral to the program, and guidelines and procedures for arrangement and management are provided in the staff development portion. The curriculum is designed to be used by bilingual teachers and assistant teachers. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so that the children can develop their full intellectual and personal potentials and can learn to function comfortably and competently in two languages.

Teacher's guidebooks in both English and Spanish are provided, and the recommended language of instruction is specified for each lesson. Instructional units contain such multimedia materials as puzzles, transparencies, filmstrips, records, games, line drawings, and photographs. They also include curriculum-based unit mastery tests that enable teachers to monitor the children's progress.

SUBJECT AREA(S)

The three components of the BECP, *Level I*, are instructional materials, staff development, and parent involvement.

–Instructional materials: These are organized into 25 instructional units built around a single theme or topic. Each unit contains approximately 15 planned activities designed to teach the 4 instructional elements—visual, auditory, motor, and ideas and concepts. The curriculum includes the following unit topics:

Unit 1. School (la escuela)
Unit 2. Body awareness (conciencia del "yo" físico)
Unit 3. Body awareness (conciencia del "yo" físico)
Unit 4. Clothing (ropa)
Unit 5. Food (comida)
Unit 6. Food (comida)
Unit 7. Family (la familia)
Unit 8. Home (la casa)
Unit 9. Appliances (aparatos)
Unit 10. Animals (animales)
Unit 11. Animals (animales)
Unit 12. Vehicles (vehículos)

Unit 13. Musical instruments (instrumentos musicales)
Unit 14. Toys (juguetes)
Unit 15. Community helpers (ayudantes de la comunidad)
Unit 16. Community helpers (ayudantes de la comunidad)
Unit 17. Buildings (edificios)
Unit 18. Self-awareness (conciencia de sí mismo)
Unit 19. Self-awareness (conciencia de sí mismo)
Unit 20. Clothing (ropa)
Unit 21. Food (comida)
Unit 22. Natural environment (la naturaleza)
Unit 23. Community environment (ambiente de la comunidad)
Unit 24. Checklist (inventario)
Unit 25: Checklist (inventario)

Each unit available in Spanish and English training components includes visual training, auditory training, motor training, ideas and concepts, and related activities.

INTENDED USERS AND BENEFICIARIES

Instructional materials: Three-year-old Spanish-Speaking children from low-income families.

Staff development: Bilingual teachers and assistant teachers who are using the *BECP, Level 1,* curriculum. Staff development activities are conducted by the supervisor.

Parent involvement: Parents and other family members whose children are enrolled in the *BECP, Level 1.*

GOAL(S) OR PURPOSE(S)

The goals are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects, the *BECP, Level 1,* moves sequentially from what the children know to what they do not know. Language and concept development is systematically incorporated throughout each instructional element. Content begins with concrete objects, moves to pictures and two-dimensional representations, and concludes with the use of words only. Within each skill level, the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

The program cannot be implemented effectively without the staff development materials. The 5-day preservice workshop is essential, along with continuing teacher training provided in the teacher's manuals. Details of teacher training are left to the supervisor.

The parent involvement product is implemented by the classroom teacher with assistance from the supervisor. Use of this product is optional.

ASSESSMENT PROVISIONS

For instructional materials, curriculum-based, criterion-referenced unit and mastery tests are provided to enable the teacher to monitor each child's progress. For the staff development portion, mastery questions keyed to each teacher's manual are provided as a guide to reading and to aid the supervisor in assessing teachers' understanding of the materials. There are no provisions for assessment of parent involvement.

TIME REQUIREMENTS

Instructional materials: One school year in an all-day also program. Adaptation provided for 1/2-day programs which may not complete all 25 units. The instructional activities also have been used in migrant programs which do not meet for a complete school year.

Staff development: Five days is the minimum for the preservice training; 10 or more days is recommended. In addition, at least 2 hours per week of inservice training is recommended. Teachers also require at least 45 minutes per day for planning and preparation.

Parent involvement: No time requirements. Home activities take 10 to 15 minutes.

IMPLEMENTATION PROCEDURES

1. No more than 20 children should be enrolled in each class.

2. Children should be from economically disadvantaged backgrounds.

3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)

4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.

5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.

6. The local supervisors should participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.

7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.

8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.

9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so that the teaching team can plan together.

Personnel Required for Product Adoption and Implementation

The *BECP, Level 1,* is designed to be taught by a teacher and a paraprofessional, both of whom are bilingual. Parent Involvement is also implemented by this teaching team.

Staff development is implemented by a supervisor. It is recommended that supervisors obtain the site staff development materials and attend a workshop for supervisors conducted by the publisher.

ASSURANCES AND CLAIMS

Assurances

There have been no reports or complaints of harm or damage resulting from the use of *BECP, Level I.* This assurance is supported by feedback from teachers in 72 field test classrooms and from field test results. The harmlessness of using the bilingual approach to teach Spanish-speaking children is demonstrated by the fact that children enrolled in the field test version of this program performed as well as monolingual English speakers on standarized tests.

No complaints relating to social, sexual, racial, or other biases have been received from teachers using either the field test or the revised published version. Although there have been no complaints the materials do make use of the generic "he" to refer to the child and "she" to refer to the teacher.

In the field test, 72 test classrooms implemented the program with developer assistance only for staff development. An additional 41 classrooms have installed the revised published program with no developer intervention.

Claims

Children enrolled in field test classes made significant gains on curriculum-based, criterion-referenced tests. This was true for all instructional elements. Project children also made significant pretest-to-posttest gains on a standardized test of general cognitive abilities. A user satisfaction questionnaire administered to field test teachers indicated satisfaction with the program. Subsequent to field test, program revisions were made to improve the product's effectiveness. Data from the revised published version are not available.

The *BECP, Level I,* was developed according to the product development process used by SEDL. This process includes the following stages: (1) Context analysis, (2) conceptual design, (3) product design and design test, (4) pilot test, (5) field test, and (6) dissemination. At each stage, the product is evaluated and revised. The published version contains revisions indicated by results from the field test. Since the initial product design, the product has been tested over a 4-year period in a total of 149 classrooms.

A careful curriculum search has identified the *BECP, Level I,* as the only truly bilingual program designed to meet the needs of 3-year-olds.

RD 110 008

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set—English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, *Home Activities for Parents*, *Paso a Paso*	1 per classroom	498.00	Reusable	National Educational Laboratories Publishers, Inc., P.O. Box 1003, Austin, Tex. 78767
Teacher staff development manuals		39.15	Reusable	
Site staff development manuals, tapes, filmstrips		81.00	Reusable	
Home Activities for Parents	1 per family	6.00	Consumable yearly	
English manuals		60.00	Reusable	
Spanish manuals		54.00	Reusable	
Paso a Paso (3 records and manual)		12.75	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

The *Bilingual Early Childhood Program, Level I*, was copyrighted in 1973 by Southwest Educational Development Laboratory (SEDL) and becomes public domain in 1978.

Complete classroom sets (including teacher's manuals), site staff development sets (including the administrator's handbook and the supervisor's manual), and optional home activities for parents are available from the publisher:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 009

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL I - THREE YEAR OLDS, INSTRUCTIONAL MATERIALS

A developmentally oriented program which emphasizes mastery of skills and concepts in 3-year-old Spanish-speaking children

The *Bilingual Early Childhood Program*, (BECP),- *Level I—Three-Year-Olds, Instructional Materials* is designed for use with 3-year-old Spanish-speaking children. The program is developmentally oriented, and is concerned with the general cognitive, psychomotor, and affective stages common to all children. It emphasizes mastery of skills and concepts in four major areas: Visual, auditory, motor, and ideas and concepts. Activities involving these content or skill areas are organized into 25 instructional units built around a single theme or topic such as "Body Awareness" and "Musical Instruments." The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes approximately 15 lessons and activities, teacher's guidebooks in Spanish and in English, materials and media for the activities, and curriculum-based unit and mastery tests. Unit topics are designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. Activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the primary language of instruction for the level I curriculum. English is introduced informally in the latter part of the school year. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. The curriculum is to be taught by a bilingual teacher and a bilingual assistant teacher. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so that the children can develop their full intellectual and personal potentials and can learn to function comfortably and competently in two languages.

SUBJECT AREA(S)

Each of the 25 instructional units contains approximately 15 planned lessons and activities utilizing puzzles, transparencies, filmstrips, audiotapes, games, line drawings, posters, and photographs. Unit content has been designed to build upon the children's prior knowledge while introducing new concepts. The units familiarize the children with concepts in several kinds of lessons and promote their application to various contexts to assure transfer and generalization of learning. For example, the concept of color is introduced in the visual training element in early units through simple matching exercises. In later units, color labels are taught in a strand of auditory activities. The concept of color is reinforced in "Ideas and Concepts," where the children are expected to describe or classify objects according to color. Unit topics are as follows:

Unit 1. Orientation to school (orientación a la escuela)
Unit 2. Body awareness (conciencia del "yo" físico)
Unit 3. Body awareness (conciencia del "yo" físico)
Unit 4. Clothing (la ropa)
Unit 5. Food (la comida)
Unit 6. Food (la comida)
Unit 7. Family (la familia)
Unit 8. Home (la casa)
Unit 9. Furniture and appliances (los muebles y los aparatos domésticos)
Unit 10. Animals (los animales)
Unit 11. Animals (los animales)
Unit 12. Vehicles (los vehículos)
Unit 13. Musical instruments (instrumentos musicales)
Unit 14. Toys (juguetes)
Unit 15. Community helpers (ayudantes de la comunidad)
Unit 16. Community helpers (ayudantes de la comunidad)
Unit 17. Buildings (edificios)
Unit 18. Self-awareness (conciencia de sí mismo)
Unit 19. Self-awareness (conciencia de sí mismo)
Unit 20. Clothing (la ropa)
Unit 21. Food (la comida)
Unit 22. Natural environment (la naturaleza)
Unit 23. Community environment (ambiente de la comunidad)
Unit 24. Checklist (inventario)
Unit 25. Checklist (inventario)

Instructional Elements

The instructional elements contain skill areas such as: Visual training—(1) visual constancy for properties of materials, (2) classification of visual stimuli, (3) special relationships, (4) visual memory, (5) part-whole relationships; auditory training—(1) identification, (2) discrimination, (3) imitation, (4) listening comprehension;

motor training—(1) directionality, (2) fine motor skills, (3) gross motor skills, (4) body concept; and ideas and concepts—(1) recognition, (2) labeling, (3) association, (4) comparing, (5) categorizing, (6) describing, (7) synthesis and application.

Related activities are activities which promote reinforcement and elaboration of the concepts and skills learned in the other elements.

Instructional Activities

The teacher's manual contains the following information for each activity: Overview—(1) objectives, (2) statement of purpose, (3) summary of materials required; and procedure—(1) introduction, (2) demonstration, (3) interaction, (4) conclusion, (5) expansion.

INTENDED USERS AND BENEFICIARIES

The product is intended for 3-year-old Spanish speakers from low-income families. Although designed primarily for 3-year-old Spanish-speaking children and their teachers, the program has also been used with English speakers. The developers rate its use with English speakers as "successful."

GOAL(S) OR PURPOSE(S)

The goals of this product are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects of the *BECP, Level I, Instructional Materials*, moves sequentially from what the children know to what they do not know. Language and concept development is systematically incorporated throughout each instructional element. Content begins with concrete objects, moves to picture and two-dimensional representations, and concludes with the use of words only. Within each skill level the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

ASSESSMENT PROVISIONS

The *BECP, Level I, Instructional Materials* contains the following curriculum-based criterion referenced tests: Unit test to assess the child's ability to meet the objectives of unit activities, mastery tests to assess the child's mastery of concepts and skills over an 8-unit interval, and pretests and posttests.

TIME REQUIREMENTS

One school year in an all-day program is required. Adaptation is provided for 1/2-day programs which may not complete all 25 units. The curriculum has also been used in migrant programs which do not meet for a complete school year.

IMPLEMENTATION PROCEDURES

1. Not more than 20 children should be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.
6. The local supervisors should participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.
7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so the teaching team can plan together.

The curriculum requires a bilingual teacher and an assistant teacher for each classroom and a supervisor for each 10 classrooms.

ASSURANCES AND CLAIMS

The *BECP, Level I, Instructional Materials* was tested over a 5-year period in rural and urban classrooms in which children from Spanish-speaking homes were enrolled. These classrooms included a high concentration of children from low-income families. Children of migrant agricultural workers have also participated in the program. Extensive feedback was collected from teachers, supervisors, and others working with the program; there have been no reports of harm or damage to children caused by participation in the curriculum.

The curriculum was designed to be relevant to the cultural, social, linguistic experiences of Spanish-speaking children, particularly Mexican American children of the Southwest. The program has also been implemented in several northern and midwestern cities where there are a large number of Puerto Rican children. Data have not been collected on the use of the program for middle-income children or native English speakers. The materials make use of the generic "he" to refer to the child and "she" to refer to the teacher.

The program has been installed in sites across the country without the direct intervention of the developers except for preservice training and consultation at the request of the sites.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set—English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, *Home Activities for Parents*	1 per classroom	498.00	Reusable	National Educational Laboratories Publishers, Inc., P.O. Box 1003, Austin, Tex. 78767
English manuals		60.00	Reusable	
Spanish manuals		54.00	Reusable	
Paso a Paso (3 records and manual)		12.75	Reusable	

DEVELOPER/AUTHOR:

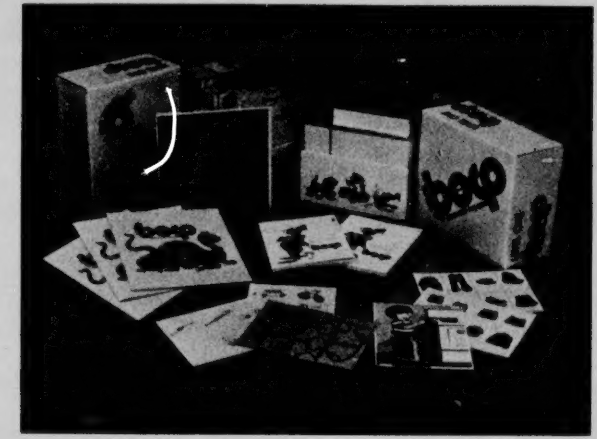
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

***BECP*, *Level I Instructional Materials*, is available as part of the *BECP*, *Level I*, and separately. The product was copyrighted in 1973 by Southwest Educational Development Laboratory and becomes public domain in 1978.**

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767



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BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL I, STAFF DEVELOPMENT

A comprehensive model for teacher preservice and inservice training

The *Bilingual Early Childhood Program* (BECP), *Level I, Staff Development* is a comprehensive model for teacher training, both preservice and inservice. It contains five teacher's manuals, accompanying filmstrips, a supervisor's manual, and an administrator's handbook. Three of the teacher's manuals form the basis for a preservice workshop conducted by the supervisor. This workshop is a comprehensive introduction for new teachers. It includes filmstrips which demonstrate model lessons and classroom arrangements. The workshop is performance based, emphasizing demonstration, role playing, and practicing of teaching skills. The supervisor's manual contains detailed instructions for conducting the workshop, including grouping and pairing of teachers, leading discussions, providing feedback, and adapting the workshop to meet the needs of more experienced teachers. The supervisor's manual also contains guidelines for implementing a bilingual preschool program, including instructions for hiring and supervising teachers, providing resources for teachers, observing in the classroom, and performing other administrative and supervisory functions.

Continuing inservice teacher training is provided through the use of the remaining two teacher's manuals. These manuals cover such topics as teacher expectations, incidental learning and modeling, adapting the program to meet children's individual needs, and effective use of equipment in a bilingual preschool program. Detailed instructions for conducting inservice training are included in the supervisor's manual.

SUBJECT AREA(S)

Staff development materials include several hours of demonstration filmstrips on classroom and lesson preparation, lesson presentation, and testing, plus the following manuals and booklets:

1. Administrator's handbook: Overview of the program and information for superintendents, principals, and other school administrators.
2. Supervisor's manual: How to conduct the performance-based preservice teacher training workshop.
3. Preservice manual—Volume 1: How the curriculum elements fit together, rationale, and goals underlying the entire program and each of the individual elements; general program information; teacher roles and responsibility, classroom organization and management; and lists of basic early childhood equipment.
4. Preservice manual—Volume 2: Detailed information about small-group instruction; sample visual, auditory, motor, ideas and concepts, and syntax of English lessons; how to prepare and administer unit and mastery tests; how to use test information to plan remedial teaching; and how to organize the classroom and plan activities so that control and discipline problems are minimized.
5. Preservice manual—Volume 3: How to set up and equip various learning centers in the preschool classroom.
6. Inservice manual—Volume 1: Practical suggestions for setting up effective learning situations and for responding to children in various situations; how teacher attitudes and expectations can influence success and failure in the classroom, how to teach through example and modeling in addition to more formal instruction; and what to do when a child does not meet the objective of a lesson.
7. Inservice manual—Volume 2: How to demonstrate the uses of manipulative equipment to the children and how to help the children learn to use the equipment independently.

INTENDED USERS AND BENEFICIARIES

Administrators, supervisors, teachers, and assistant teachers of Spanish-speaking 3-year-olds are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

Preservice training goals are: (1) To train the teacher in setting up a preschool classroom for maximum program effectiveness; (2) to instruct the teacher in methods of demonstrating and teaching with classroom materials and equipment; (3) to develop teacher skills in classroom assessment of children's learning; (4) to demonstrate and simulate ways of instructing young children; and (5) to assist the teacher in planning, scheduling, and managing classroom activities.

Inservice training goals are: (1) To instruct the teacher in ways of identifying and assisting children who demonstrate problems in learning, (2) to develop the teacher awareness of the ways children learn from modeled behavior, (3) to develop teacher awareness of the effect of negative and positive expectations on the behavior of children, and (4) to further develop the teacher's ability to maximize the learning which can occur through the use of classroom materials.

PATTERNS OF USE

The preservice training manuals are designed to be used with the accompanying filmstrips in a preservice workshop conducted by the supervisor. The preservice training model provided in the supervisor's manual details essential activities although the actual structure of the workshop is left to the supervisor.

The inservice manuals are designed to be used as part of a continuing program of teacher training, the specific application of which is a supervisory function.

ASSESSMENT PROVISIONS

There is no formal testing. Teacher evaluation is an ongoing part of the supervisor's activities with observational checklists provided.

The preservice training model workshop is heavily performance based in its methods and objectives. Participants are expected not merely to read about and discuss their roles in the program, but also to show that they understand and can perform the behaviors associated with those roles. They practice teaching lessons, giving equipment demonstrations, making out schedules, planning related activities, making smooth transitions, and setting up their classrooms.

The supervisor's manual contains mastery questions to assess the teacher's understanding of the material presented. It also contains guidelines for observing and evaluating teacher classroom performance and for providing feedback and guidance.

TIME REQUIREMENTS

The preservice workshop requires a minimum of 5 days, 6 hours per day. Inservice training is an ongoing activity consisting of 2 to 3 hours of training per week throughout the school year. In addition, the teacher-assistant teacher team should have a minimum of 45 minutes each day to plan for the following day.

During the first part of the year, the supervisor visits the classrooms approximately 1-1/2 to 3 hours per week to observe.

IMPLEMENTATION PROCEDURES

The requirements for effective presentation and use of the staff development product are as follows:

1. During the first year of the program, it is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms to assist with regular and continuous staff development.
2. The local supervisor will participate in a 7- to 10-day preservice workshop for supervisors, designed specifically to train them to install the program and to conduct preservice and inservice teacher training.
3. A 5-day preservice workshop for teachers will be held at each site before instructional activities begin.
4. Staff development supervisors should spend approximately 1-1/2 to 3 hours each day observing in classrooms.
5. Teachers should be given 2 or 3 hours per week for inservice training, as well as daily planning time.

ASSURANCES AND CLAIMS

No reports of harm or damage to teachers or children resulting from the use of staff development activities were reported.

All materials in the *Bilingual Early Childhood Program, Level I*, including the staff development materials, were designed to be relevant to the cultural, social, and linguistic experiences of Spanish speakers. It is recognized, however, that teachers may or may not share these experiences, and the teacher materials do not assume a particular background or heritage. The generic "she" is used to refer to the teacher and the supervisor, and "he" is used to refer to the child.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Site staff development manuals, tapes and filmstrips	1 set per site	81.00	Reusable	
Teacher staff development manuals (not including *Paso a Paso* or *Home Activities for Parents*)	1 set per teacher	39.15	Reusable	
Paso a Paso—3 records and manual	1 set per teacher	17.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

Complete Staff Development materials are available as part of the *Bilingual Early Childhood Program, Level I*, as well as separately.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain in 1978. It is available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL 1, PARENT INVOLVEMENT

A program designed to be used by parents at home to reinforce the materials used by children in school

The parent involvement product is comprised of the following materials: A teacher's manual, *School and After: Parents Help*; a filmstrip with audio recording, "School and After: Parents Help," and a parent's manual, *Home Activities for Parents*, containing more than 100 individual learning activities written in Spanish and English.

Recent work with low-income parents indicates that they are no less concerned about their children's education than are more advantaged parents. Because of their limited education, resources, and power in the community, low-income parents often do not know how to maximize their children's educational experiences. The parent involvement product is designed to assist parents in these areas by involving parents as partners in the task of helping children reach their potentials. Parent involvement provides information and resources that will help parents to accomplish this task successfully.

The materials are designed for use at home to reinforce what the children have learned in school. Parents learn specific skills so that they feel secure in their own knowledge and develop a greater interest in their children's work. To develop vocabularies and concepts through communication, parents are encouraged to emphasize conversation with their children. The importance of language and communication with adults as the basis for intellectual development is stressed.

More than 100 individual parent activities include pictures, games, and stories which can be used easily in the home. Normal situations are emphasized—cooking dinner or walking to the bus stop can be turned into educational experiences. The product seeks to establish in the parents a positive expectation of the child's ability to achieve. This can greatly accelerate success at school.

SUBJECT AREA(S)

The product has two major functions or elements. The first element is carried out by the teacher, supervisor, or parent involvement agent to insure that the goals of the program are met. These activities include: (1) Making home visits to meet the children and the parents before school begins, (2) conducting an orientation meeting at school for parents, (3) organizing a parent advisory committee (PAC), (4) involving parents in classroom observation, (5) involving parents as participants in classroom activities, and (6) involving parents in field trip activities.

The second element is designed to help parents become more effective teachers of their preschool children. The purpose of this element is to develop the parents' awareness of their teaching roles and to encourage their participation in the formal education of their children.

INTENDED USERS AND BENEFICIARIES

Three-year-old Spanish-speaking children and their parents are the intended users and beneficiaries.

Although designed primarily for 3-year-old Spanish-speaking children and their parents, the program has also been used with English speakers. The developers rate its use with English speakers as "successful."

GOAL(S) OR PURPOSE(S)

The parent involvement product has three goals: (1) To initiate and maintain positive attitudes, interaction, and understanding between home and school regarding early childhood education and parent involvement; (2) to increase the parents' knowledge of community resources and facilities and how these can be used to help meet their needs; and (3) to inform the parents of their children's learning experiences in school.

PATTERNS OF USE

Unit packets are sequential and cumulative, providing a complete program. The activities may also be used independently.

ASSESSMENT PROVISIONS

There is no formal testing. The home activities that the parent performs with the child reinforce what the child has learned at school.

TIME REQUIREMENTS

Each home activity in the parent manual requires approximately 10-15 minutes to complete. The parents are free to spend the amount of time they feel is necessary for each activity. The home activities continue throughout the school year.

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The parent advisory committee meets once a month throughout the year.

IMPLEMENTATION PROCEDURES

Strategies for implementation of the parent involvement product include:

1. Home visits made by the teacher or the parent involvement agent.
2. Orientation meeting for parents conducted at the school.
3. Organizing a parent advisory committee.
4. Involvement of parents in classroom observation.
5. Involvement of parents as participants in classroom activities.
6. Involvement of parents in field trip activities.
7. Conducting an orientation to the parent education element.
8. Giving demonstration sessions for home activities.

Personnel Required for Product Adoption and Implementation

The home activities for parents is designed to be implemented by a teacher in a bilingual preschool program for 3-year-old children.

ASSURANCES AND CLAIMS

There have been no reports of harm or damage to children or families caused by the use of these materials. The materials have been used in conjunction with the *Bilingual Early Childhood Program, Level I*, but examination of the activities suggests that they are applicable to a variety of settings. The materials are designed for use with Spanish-speaking families, and no data are available either to support or discourage their use with English-speaking families. The materials do not appear to promote any social, sexual, or racial biases; and no complaints of this nature have been received. The printed materials use the generic "he."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher staff development manuals	1 set per teacher	32.00	Reusable	
Home activities for parents	1 per family	6.00	Consumable yearly	

DEVELOPER/AUTHOR:

**Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701**

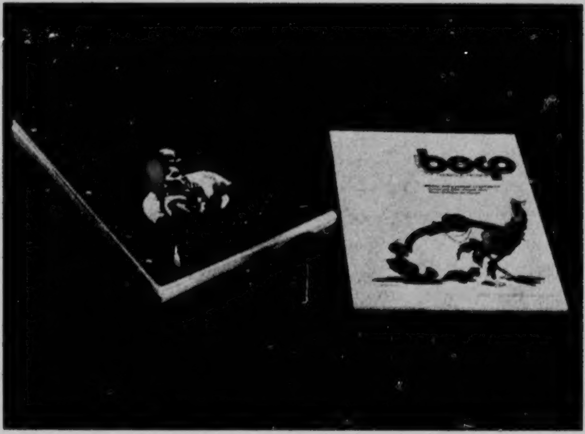
**Shari Nedler, Program Director
Joyce Evans, Program Coordinator**

AVAILABILITY

Parent Involvement materials are available as part of the *Bilingual Early Childhood Program, Level I*, as well as separately.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain in 1978. It is available from the publisher/distributor:

**National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767**



INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL II

A comprehensive learning system for 4-year-old Spanish-speaking children, their teachers, and parents

The *Bilingual Early Childhood Program* (BECP), *Level II*, is a comprehensive learning system for 4-year-old Spanish-speaking children, their teachers and parents. It is part of a 2- or 3-year sequential early childhood program developed by the Southwest Educational Development Laboratory (SEDL). The three products of the learning system are: Materials, staff development, and parental involvement materials. The Level II instructional materials contain 25 instructional units which include six kinds of activities—visual, auditory, motor, ideas and concepts (cognitive), syntax of English, and English vocabulary. The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes 20 to 35 lessons and activities, teacher guidebooks, materials and media required for the activities, and curriculum-based unit and mastery tests. Each instructional unit is built around a single theme such as body awareness or community helpers and is designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. The program also provides for relating the children's learning to their home situations through home activities and materials for use by parents. Staff Development provides preservice and inservice training for teachers in the principles of classroom management, teaching strategies, effective use of materials and equipment, testing, and working with parents. The total package provides a comprehensive framework within which children can develop their skills and abilities in Spanish and in English, parents can be involved in the educational process, and teachers can expand their teaching skills.

The BECP, Level II is a developmental program concerned with the general cognitive, psychomotor, and affective stages common to all children. The activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the language of instruction for the first part of the program, and Spanish continues to be used throughout the program. Once the children have mastered concepts and skills in Spanish, the same concepts are systematically introduced in English. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. Classroom arrangement and management are integral to the program, and guidelines and procedures for arrangement and management are provided in Staff Development. The curriculum is designed to be used by a bilingual teacher and assistant teacher. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so the children can develop their full intellectual and personal potentials and can learn to function comfortably and competently in two languages.

Teacher guidebooks in both English and Spanish are provided, and the recommended language of instruction is specified for each lesson. Instructional units contain such multimedia materials as puzzles, transparencies, filmstrips, records, games, line drawings, and photographs. They also include curriculum-based unit mastery tests that enable teachers to monitor the children's progress.

SUBJECT AREA(S)

The three parts of the BECP, Level II are instructional materials, staff development and parent involvement.

The instructional materials are organized into 25 instructional units built around a single theme or topic. Each unit contains 20-35 planned activities designed to teach the 6 instructional elements: visual, auditory, motor, ideas and concepts, syntax of English, and building vocabulary.

Staff Development provides for a comprehensive preservice teacher training workshop and for continuing inservice training. Teacher manuals, some accompanied by filmstrips, form the basic materials for staff development. Extensive materials are also provided for administrators and supervisors.

Through parent involvement, the program relates school learning to the home and involves the children's parents in the educational process. *School and After: Parents Help* (a manual for the teacher) and *Home Activities for Parents* (over 100 learning activities to be conducted at home and geared to the BECP, Level II curriculum activities) comprise the parent involvement materials.

INTENDED USERS AND BENEFICIARIES

For instructional materials, intended users are 4-year old Spanish-speaking children from low-income families. Four-year-olds who have completed the BECP, Level I (for 3-year-olds) may complete the early units more quickly than entering 4-year-olds.

For staff development, bilingual teachers and assistant teachers who are using the BECP, Level II curriculum are the intended users. Staff development activities are conducted by the supervisor.

For parent involvement, parents and other family members whose children are enrolled in the BECP, Level II are the intended users.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects the BECP, Level II moves sequentially from what the children know to what they do not know. Language and concept development are systematically incorporated throughout each instructional element. Concepts appear first in Spanish, then in English; content begins with concrete objects, moves to pictures and two-dimensional representations, and concludes with the use of words only. Within each skill level, the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

The program cannot be implemented effectively without the staff development materials. The 5-day preservice workshop is essential, along with continuing teacher training provided in the teacher manuals. Details of teacher training are left to the supervisor.

The parent involvement materials are implemented by the classroom teacher with assistance from the supervisor. Use of this product is optional.

ASSESSMENT PROVISIONS

For instructional materials, curriculum-based criterion referenced unit and mastery tests are provided to enable the teacher to monitor each child's progress.

For staff development, mastery questions keyed to each teacher's manual are provided as a guide to reading and to enable the supervisor to assess teachers' understanding of the materials.

For parent involvement, no provisions are made for assessment.

TIME REQUIREMENTS

For instructional materails, the curriculum is an all-day program for 1 school year. Adaptation is provided for 1/2-day programs which may not complete all 25 units. The curriculum has also been used in migrant programs which do not meet for 1 complete school year.

For staff development, 5 days is the absolute minimum for the preservice training; 10 or more days is recommended. In addition, at least 2 hours per week of inservice training is recommended. Teachers also require at least 45 minutes per day for planning and preparation.

For parent involvement, no provisions are made for assessment.

IMPLEMENTATION PROCEDURES

1. No more than 20 children should be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.
6. The local supervisors should participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.
7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so the teaching team can plan together.

Personnel Required for Product Adoption and Implementation

The instructional materials part is designed to be taught by a professional and a paraprofessional, both of whom are bilingual. Parent involvement is also implemented by this teaching team.

Staff development is implemented by a supervisor. It is recommended that staff development supervisors obtain the site staff development materials and attend a workshop for supervisors conducted by the publisher.

ASSURANCES AND CLAIMS

Assurances

There have been no reports or complaints of harm or damage resulting from the use of the BECP, Level II curriculum. This assurance is supported by feedback from teachers in 275 field test classrooms and from field test results. Children enrolled in the field test version of this program performed as well as monolingual English speakers on standardized tests.

No complaints relating to social, sexual, racial, or other biases have been received from teachers using either the field test or the revised published version. Though there have been no complaints, the materials do make use of the generic "he" to refer to the child and "she" to refer to the teacher.

In the field test, 275 test classrooms implemented the program with developer assistance for the staff development component. An additional 169 classrooms have installed the revised published program with no developer intervention.

Claims

Children enrolled in field test classes made significant gains on curriculum-based criterion-referenced tests. This was true for all instructional elements except auditory. Project children also made significant pretest-to-posttest gains on a standardized test of general cognitive abilities. Some children also were administered an attitude inventory designed to assess their feelings about school. They responded favorably to all but one aspect measured by the inventory. A user satisfaction questionnaire administered to field test teachers indicated, with few exceptions, general satisfaction with the program. Subsequent to field test, program revisions were made to improve the product's effectiveness. Data from the revised published version, available from one site only, indicated that pupils successfully mastered the curriculum content, based upon data from the curriculum-based criterion-referenced tests.

The BECP, Level II, curriculum was developed according to the product development process used by Southwest Educational Development Laboratory (SEDL). This process includes the following stages: (1) Context analysis, (2) conceptual design, (3) product design and design test, (4) pilot test, (5) field test, and (6) dissemination. At each stage, the product is evaluated and revised. The published version contains revisions indicated by results from the field test. Since the initial product design, the product has been tested over a 4-year period in a total of 416 classrooms.

The BECP, Level II curriculum is the only replicable, comprehensive bilingual program presently available for 4-year-olds.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set: English and Spanish manuals, spirit masters, filmstrips, records, teacher staff development manuals, home activities for parents, *Paso a Paso*	1 per classroom	420.00	Reusable	
Teacher staff development manuals		39.15	Reusable	
Site staff development manuals, tapes, and filmstrips*	1 per site	81.00	Reusable	
Home Activities for Parents	1 per family	6.00	Consumable yearly	
English instructional manuals		60.00	Reusable	
Spanish instructional manuals		54.00	Reusable	
Paso a Paso (records and manual)		12.75	Reusable	

*Not included in classroom set.

DEVELOPER/AUTHOR:

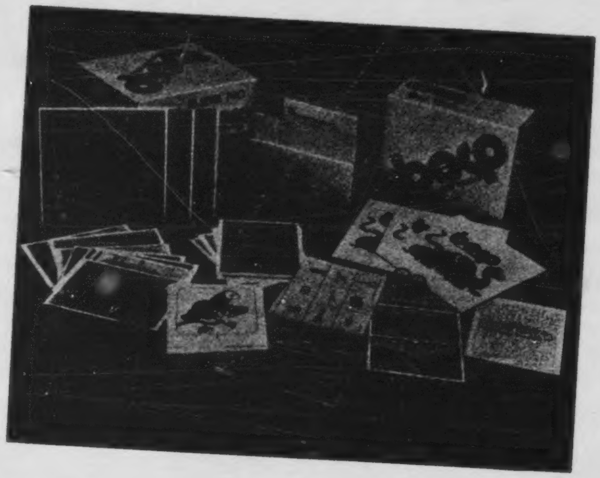
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Director
Joyce Evans, Program Coordinator

AVAILABILITY

Complete classroom sets including teacher manuals, site staff development sets including the administrator's handbook and the supervisor's manual, and optional home activities for parents are available from the National Educational Laboratories Publishers.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain in 1978. The distributor is:
National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 013

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL II, INSTRUCTIONAL MATERIALS

A developmentally oriented program concerned with mastery of skills and concepts among 4-year-old Spanish-speaking children

The *Bilingual Early Childhood Program, Level II, Instructional Materials* (BECP), guides are designed for use with 4-year-old Spanish-speaking children. The program is developmentally oriented, and is concerned with the general cognitive, psychomotor, and affective stages common to all children. It emphasizes mastery of skills and concepts in six major areas—visual, auditory, motor, ideas and concepts, syntax of English, and vocabulary. Activities involving these content or skill areas are organized into 25 instructional units built around a single theme or topic such as "Community Workers" and "Musical Instruments." The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes 20 to 35 lessons and activities, teacher's guidebooks in Spanish and in English, materials and media for the activities, and instructionally based unit and mastery tests. Unit topics are designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. Activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the language of instruction for the first part of the program, and Spanish continues to be used throughout. Once the children have mastered concepts and skills in Spanish, the same concepts are systematically introduced in English. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. The curriculum is to be taught by a bilingual teacher and a bilingual assistant teacher. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so that the children can develop their full intellectual and personal potentials and can learn to function comfortably and competently in two languages.

SUBJECT AREA(S)

Each of the 25 instructional units contains 20 to 35 planned lessons and activities utilizing puzzles, transparencies, filmstrips, audiotapes, games, line drawings, posters, and photographs. Unit content has been designed to build upon the children's prior knowledge while introducing new concepts. The units familiarize the children with concepts in several kinds of lessons and promote their application to various contexts to assure transfer and generalization of learning. For example, the concept of color is introduced in the visual element in early units through simple matching exercises. In later units, color labels are taught in a strand of auditory activities. The concept of color is reinforced in the ideas and concepts element where the children are expected to describe or classify objects according to color. Unit topics are as follows:

Unit 1. School (la escuela)
Unit 2. Body awareness (conciencia del "yo" físico)
Unit 3. Animals (animales)
Unit 4. Vehicles (vehículos)
Unit 5. Clothing (ropa)
Unit 6. Musical instruments (instrumentos musicales)
Unit 7. Food (comida)
Unit 8. Community workers (trabajodores de la comunidad)
Unit 9. Tools (herramientas)
Unit 10. Family (la familia)
Unit 11. Buildings (edificios)
Unit 12. Money (dinero)
Unit 13. Toys (juguetes)
Unit 14. Furniture (muebles)
Unit 15. Wild animals (animales salvajes)
Unit 16. Fish, birds, and insects (peces, pájaros, y insectos)
Unit 17. Family (la familia)
Unit 18. Food (comida)
Unit 19. Clothing (ropa)
Unit 20. Furniture (muebles)
Unit 21. Tools (herramientas)
Unit 22. Buildings (edificios)
Unit 23. Plants (plantas)
Unit 24. Checklist (inventario)
Unit 25. Checklist (inventario)

INTENDED USERS AND BENEFICIARIES

Four-year-old Spanish speakers from low-income families are the intended users. Four-year-olds who have completed the BECP, Level I (for 3-year-olds), may complete the early units more quickly than entering 4-year-olds.

Although designed primarily for 4-year-old Spanish-speaking children and their teachers, the product has also been used with English speakers. The developers rate its use with English speakers as "successful," but field test data supporting this claim have not been collected.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects the BECP, Level II, moves sequentially from what the children know to what they do not know. Language and concept development is systematically incorporated throughout each instructional element. Concepts appear first in Spanish, then in English; content begins with concrete objects, moves to pictures and two-dimensional representations, and concludes with the use of words only. Within each skill level, the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

ASSESSMENT PROVISIONS

The BECP, Level II, contains the following curriculum-based criterion-referenced tests: Unit tests to assess the child's ability to meet the objectives of unit activities, mastery tests to assess the child's mastery of concepts and skills over an 8-unit interval, and pretests and posttests.

TIME REQUIREMENTS

One school year in an all-day program is required. Adaptation is provided for 1/2-day programs which may not complete all 25 units. The curriculum has also been used in migrant programs which do not meet for a complete school year.

IMPLEMENTATION PROCEDURES

1. No more than 20 children should be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.
6. The local supervisors should participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.
7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so that the teaching team can plan together.

Personnel Required for Product Adoption and Implementation

The curriculum requires a bilingual teacher and a bilingual assistant teacher for each classroom and a supervisor for each 10 classrooms.

ASSURANCES AND CLAIMS

The BECP, Level II, was tested over a 5-year period in rural and urban classrooms in which children from Spanish-speaking homes were enrolled. These classrooms included a high concentration of children from low-income families. Children of migrant agricultural workers have also participated in the program. Extensive feedback was collected from teachers, supervisors, and others working with the program; there have been no reports of harm or damage to children caused by use of the instructional materials.

The instructional materials are designed to be relevant to the cultural, social, and linguistic experiences of Spanish-speaking children, particularly Mexican-American children of the Southwest. The product has also been implemented in several northern and midwestern cities where there are a large number of Puerto Rican children. Data have not been collected on the use of the program for middle-income children or native English speakers. The materials make use of the generic "he" to refer to the child, and "she" to refer to the teacher.

The product has been installed in sites across the country without the direct intervention of the developers except for preservice training and consultation at the request of the users.

RD 110 013

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set: English and Spanish manuals, spirit masters, filmstrips, records, staff development manuals, *Home Activities for Parents, Paso a Paso*	1 per classroom of 20 students	420.00	Reusable	
English manuals only	1 per teacher	60.00	Reusable	
Spanish manuals only	1 per teacher	54.00	Reusable	
Home Activities for Parents	1 per family	8.00	Consumable yearly	
Paso a Paso (3 records and manual)	1 per teacher	12.75	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

The product carries a 1973 copyright by Southwest Educational Development Laboratory and becomes public domain in 1978. Order from:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 014

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL II, STAFF DEVELOPMENT

A comprehensive model for teacher training, both preservice and inservice

The *Bilingual Early Childhood Program* (BECP), *Level II, Staff Development* is a comprehensive model for teacher training, both preservice and inservice. It contains five teacher's manuals, accompanying filmstrips, a supervisor's manual, and an administrator's handbook. Three of the teacher's manuals form the basis for a preservice workshop conducted by the supervisor. This workshop is a comprehensive introduction for new teachers. It includes filmstrips which demonstrate model lessons and classroom arrangements. The workshop is performance based, emphasizing demonstration, role playing, and practicing of teaching skills. The supervisor's manual contains detailed instructions for conducting the workshop, including grouping and pairing of teachers, leading discussions, providing feedback, and adapting the workshop to meet the needs of more experienced teachers. The supervisor's manual also contains guidelines for implementing a bilingual preschool program including instructions for hiring and supervising teachers, providing resources for teachers, observing in the classroom, and performing other administrative and supervisory functions.

Continuing inservice teacher training is provided through the use of the remaining two teacher's manuals. These manuals cover such topics as teacher expectations, incidental learning and modeling, adapting the program to meet children's individual needs, and effective use of equipment in a bilingual preschool program. Detailed instructions for conducting inservice training are included in the supervisor's manual.

SUBJECT AREA(S)

Staff development materials include several hours of demonstration filmstrips on classroom and lesson preparation, lesson presentation, and testing, plus the following manuals and booklets:

1. Administrator's handbook: Overview of the program and information for superintendents, principals, and other school administrators.
2. Supervisor's manual: How to conduct the performance-based preservice teacher training workshop.
3. Preserive manual—volume 1: How the curriculum elements fit together, rationale and goals underlying the entire program and each of the individual elements; general program information, teacher roles and responsibility; lists of basic early childhood equipment.
4. Preservice manual—volume 2: Detailed information about small-group instruction; sample visual, auditory, motor, ideas and concepts, and syntax of English lessons; how to prepare and administer unit and mastery tests; how to use test information to plan remedial teaching; how to organize the classroom and plan activities so that control and discipline problems are minimized.
5. Preservice manual—volume 3: How to set up and equip various learning centers in the preschool classroom.
6. Inservice manual—volume 1: Practical suggestions for setting up effective learning situations and for responding to children in various situations; how teacher attitudes and expectations can influence success and failure in the classroom; how to teach through example and modeling in addition to more formal instruction; and what to do when a child does not meet the objective of a lesson.
7. Inservice manual—volume 2: How to demonstrate the uses of manipulative equipment to the children and how to help the children learn to use the equipment independently.

INTENDED USERS AND BENEFICIARIES

Administrators, supervisors, teachers, and assistant teachers of Spanish-speaking 4-year-olds are the intended users.

GOAL(S) OR PURPOSE(S)

Preservice training goals are: (1) To train the teacher in setting up a preschool classroom for maximum program effectiveness; (2) to instruct the teacher in methods of demonstrating and teaching with classroom materials and equipment; (3) to develop teacher skills in classroom assessment of children's learning; (4) to demonstrate and simulate ways of instructing young children; and (5) to assist the teacher in planning, scheduling, and managing classroom activities.

Inservice training goals are: (1) To instruct the teacher in ways of identifying and assisting children who demonstrate problems in learning, (2) to develop the teacher awareness of the ways children learn from modeled behavior, (3) to develop teacher awareness of the effect of negative and positive expectations on the behavior of children, and (4) to further develop the teacher's ability to maximize the learning which can occur through the use of classroom materials.

PATTERNS OF USE

Staff development is presented to the school personnel in two forms, as preservice training and as inservice training.

The preservice training model has been developed for use in a 1-week (5-day) workshop intended to help new teachers make a smooth start. The workshop is designed on the assumption that the teachers have little or no prior knowledge or experience in the program. Emphasis is placed on the instructional model, rationale, and practice in teaching and classroom organization techniques.

The 5-day workshop is an absolute minimum training requirement. It is used as a model only because 5 days is the maximum time available for preservice training in many school districts.

The model workshop for new teachers has been planned with several criteria in mind. First, the workshop stresses the knowledge and skills required for preparing the classroom and getting the school year off to a good start. Knowledge and skills which will be important later have been left for treatment during future inservice training.

The differing concerns of teachers with different levels of experience with the product have also been taken into account. Teachers just beginning to use the product are primarily concerned about what they have to do and how they should do it. Once they have mastered the basic instructional model and the necessary teaching techniques, they become more concerned about the rationales underlying the techniques and about how to adapt the basic model to meet the needs of individual children. Therefore, the workshop concentrates primarily on presenting the basic model and on providing practice with the basic techniques, leaving analysis and discussion of rationales and adaptation problems for later inservice meetings and workshops.

The preservice workshop is ordinarily conducted by the supervisor, although others may also be involved. The term "trainer" is used to refer to the supervisor or anyone else who has responsibility for planning and leading one or more workshop sessions.

Two or three hours per week for inservice training is strongly recommended, especially for new teachers. In addition, teachers and assistant teachers should have a minimum of 45 minutes per day together to plan their activities for the following day.

It is also recommended that staff development supervisors spend approximately 1-1/2 to 3 hours each day observing in classrooms at the beginning of the year.

ASSESSMENT PROVISIONS

There is no formal testing. Teacher evaluation is an ongoing part of the supervisor's activities with observational checklists provided.

The preservice training model workshop is heavily performance based in its methods and objectives. Participants are expected not merely to read about and discuss their roles in the program, but also to show that they understand and can perform the behaviors associated with those roles. They practice teaching lessons, giving equipment demonstrations, making out schedules, planning related activities, making smooth transitions, and setting up their classrooms.

TIME REQUIREMENTS

The preservice workshop requires a minimum of 5 days, 6 hours per day. Inservice training is an ongoing activity consisting of 2 to 3 hours of training per week throughout the school year. In addition, the teacher-assistant teacher team should have a minimum of 45 minutes each day to plan for the following day.

The supervisor will visit the classrooms approximately 1-1/2 to 3 hours per week to observe during the first part of the year.

IMPLEMENTATION PROCEDURES

The requirements for effective presentation and use of the staff development product are as follows:

1. During the first year of the program, it is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms to assist with regular and continuous staff development.
2. The local supervisor will participate in a 7- to 10-day preservice workshop for supervisors, designed specifically to train them to install the program and to conduct preservice and inservice teacher training.
3. A 5-day preservice workshop for teachers will be held at each site before instructional activities begin.
4. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
5. Teachers should be given 2 or 3 hours per week for inservice training, as well as daily planning time.

ASSURANCES AND CLAIMS

No reports of harm or damage to teachers or children resulting from use of the staff development activities were reported.

All materials in the *Bilingual Early Childhood Program, Level II*, including the staff development materials, were designed to be relevant to the cultural, social, and linguistic experiences of Spanish speakers. It is recognized, however, that teachers may or may not share these experiences, and the teacher materials do not assume a particular background or heritage. The generic "she" is used to refer to the teacher and the supervisor, and "he" is used to refer to the child.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Site staff development manuals, tapes, and filmstrips	1 set per site	81.00	Reusable	
Teacher staff development manuals (not including *Paso a Paso* or *Home Activities for Parents*)	1 set per teacher	39.15	Reusable	
Paso a Paso (3 records and manual)	1 set per teacher	17.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

Complete staff development materials are available as part of the *Bilingual Early Childhood Program, Level II*, as well as separately.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain after September 1978. It is available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 015

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL II, PARENT INVOLVEMENT

A set of parent activities designed for use at home to reinforce what the children have learned in school

The parent involvement product is comprised of the following materials: A teacher's manual, *School and After: Parents Help*, a filmstrip with audiorecording, "School and After: Parents Help," and a parent's manual, *Home Activities for Parents*, containing 60 individual learning activities written in Spanish and English.

Recent work with low-income parents indicates that they are no less concerned about their children's education than are more advantaged parents. Because of their limited education, resources, and power in the community, low-income parents often do not know how to maximize their children's educational experiences. The parent involvement product is designed to assist parents in these areas by involving parents as partners in the task of helping children reach their potentials. Parent involvement provides information and resources that will help parents to accomplish this task successfully.

No early childhood education program can fully achieve its goals without support from parents.

The materials are designed for use at home to reinforce what the children have learned in school. Parents learn specific skills so that they feel secure in their own knowledge and develop a greater interest in their children's work. To develop vocabularies and concepts through communication, parents are encouraged to emphasize conversation with their children. The importance of language and communication with adults as the basis for intellectual development is stressed.

More than 100 individual parent activities include pictures, games, and stories which can be used easily in the home. Normal situations are emphasized—cooking dinner or walking to the bus stop can be turned into educational experiences. The product seeks to establish in the parents a positive expectation of the child's ability to achieve. This can greatly accelerate success at school.

SUBJECT AREA(S)

The product has two major functions or elements. The first element involves parents in the school setting and is carried out by the teacher, supervisor, or parent involvement agent to insure that the goals of the program are met. These activities include: (1) Making home visits to meet the children and the parents before school begins, (2) conducting an orientation meeting at school for parents, (3) organizing a parent advisory committee (PAC), (4) involving parents in classroom observation, (5) involving parents as participants in classroom activities, and (6) involving parents in field trip activities.

The second element is designed to help parents become more effective teachers of their preschool children. The purpose of this element is to develop the parents' awareness of their teaching roles and to encourage their participation in the formal education of their children.

INTENDED USERS AND BENEFICIARIES

Five-year-old Spanish-speaking children and their parents are the intended users and beneficiaries.

Although designed primarily for 5-year-old Spanish-speaking children and their parents, the program has also been used with English speakers. The developers rate its use with English speakers as "successful," but field test data supporting this claim have not been collected due to lack of funding.

GOAL(S) OR PURPOSE(S)

The parent involvement product has three goals: (1) To initiate and maintain positive attitudes, interaction, and understanding between home and school regarding early childhood education and parent involvement, (2) to increase the parents' knowledge of community resources and facilities and how these can be used to help meet their needs, and (3) to inform the parents of their children's learning experiences in school.

PATTERNS OF USE

Unit packets are sequential and cumulative, providing a complete program. The activities may also be used independently.

ASSESSMENT PROVISIONS

There is no formal testing. The home activities that the parent practices with the child reinforce what the child has learned at school.

TIME REQUIREMENTS

Each home activity in the parent manual requires approximately 10-15 minutes to complete. The parents are free to spend the amount of time they feel is necessary for each activity. The home activities continue throughout the school year.

The parent advisory committee meets once a month throughout the year.

IMPLEMENTATION PROCEDURES

Strategies for implementation of the Parent Involvement product include:

1. Home visits made by the teacher or the parent involvement agent.
2. Orientation meeting for parents conducted at the school.
3. Organizing a parent advisory committee.
4. Involvement of parents in classroom observation.
5. Involvement of parents as participants in classroom activities.
6. Involvement of parents in field trip activities.
7. Conducting an orientation to the parent education element.
8. Giving demonstration sessions for home activities.

Personnel Required for Product Adoption and Implementation

The home activities for parents are designed to be implemented by a teacher in a bilingual preschool program for 4-year-old children.

ASSURANCES AND CLAIMS

There have been no reports of harm or damage to children or families caused by the use of these materials. The materials have been used only in conjunction with the *Bilingual Early Childhood Program, Level II*, but examination of the activities suggests that they are applicable to a variety of settings. The materials are designed for use with Spanish-speaking families, and no data are available either to support or discourage their use with English-speaking families. The materials do not appear to promote any social, sexual, or racial biases; and no complaints of this nature have been received. The printed materials use the generic "he."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher staff development manuals	1 set per teacher	32.00	Reusable	
Home Activities for Parents	1 per family	6.00	Consumable yearly	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

Parent Involvement materials are available as part of the *Bilingual Early Childhood Program, Level II*, as well as separately.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain in 1978. It is available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 016

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL III

*A comprehensive learning system for 3-year-old
Spanish-speaking children, their teachers, and parents*

The *Bilingual Early Childhood Program* (BECP), *Level III*, is a comprehensive learning system for 5-year-old Spanish-speaking children, their teachers, and parents. It is the final part of a 3-year sequential early childhood product developed by the Southwest Educational Development Laboratory (SEDL). The three components of the learning system are: Instructional Materials, Staff Development, and Parent Involvement. The Level III instructional materials contain 20 instructional units which include 8 kinds of activities: Visual, auditory, motor, ideas and concepts (cognitive), syntax of English, English vocabulary, prewriting, and exploring and discovering. The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes 20-35 lessons and activities, teacher guidebooks, materials and media required for the activities, and curriculum-based unit and mastery tests. Each instructional unit is built around a single theme, such as body awareness or community helpers, and is designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. The product also provides for relating the children's learning to their home situations through home activities and materials for use by parents. The staff development component provides preservice and inservice training for teachers in the principles of classroom management, teaching strategies, effective use of materials and equipment, testing, and working with parents. The total package provides a comprehensive framework within which children can develop their skills and abilities in Spanish and English, parents can be involved in the educational process, and teachers can expand their teaching skills.

The program is a developmental product concerned with the general cognitive, psychomotor, and affective stages common to all children. The activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the language of instruction for the first part of the program, and Spanish continues to be used throughout the program. Once the children have mastered concepts and skills in Spanish, the same concepts are systematically introduced in English. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. Classroom arrangement and management are integral to the program, and guidelines and procedures for arrangement and management are provided in the staff development component. The instructional materials are designed to be used by a bilingual teacher and a bilingual assistant teacher. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so that the children can develop their full intellectual and personal potentials and can learn to function comfortably and competently in two languages.

Teacher guidebooks in both English and Spanish are provided, and the recommended language of instruction is specified for each lesson. Instructional units contain such multimedia materials as puzzles, transparencies, filmstrips, records, games, line drawings, and photographs. They also include curriculum-based unit mastery tests that enable teachers to monitor the children's progress.

SUBJECT AREA(S)

The three products of the *Bilingual Early Childhood Program, Level III* are instructional materials, staff development, and parent involvement.

The instructional materials are organized into 20 instructional units built around a single theme or topic. Each unit contains from 20 to 30 planned activities designed to teach the 8 instructional elements: Visual, auditory, motor, ideas and concepts, syntax of English, building vocabulary, prewriting, and exploring and discovering. The materials include the following unit topics:

Unit 1: School (La escuela)
Unit 2: School Safety (Seguridad en la escuela)
Unit 3: Community Helpers (Ayudantes de la comunidad)
Unit 4: Community Helpers (Ayudantes de la comunidad)
Unit 5: Body Awareness (Conciencia del "yo" físico)

Unit 6: Body Senses (Los sentidos del cuerpo)
Unit 7: Clothing (Ropa)
Unit 8: Food (Comida)
Unit 9: Health (La salud)
Unit 10: Toys (Juguetes)
Unit 11: Family (La familia)
Unit 12: Classroom Environment (Ambiente de la sala de clase)
Unit 13: Toys (Juguetes)
Unit 14: Transportation (Transportación)
Unit 15: Materials (Materiales)
Unit 16: Plants (Plantas)
Unit 17: Animals (Animales)
Unit 18: School (La escuela)
Unit 19: Self-Awareness (Conciencia de sí mismo)
Unit 20: Checklist (Inventario)

INTENDED USERS AND BENEFICIARIES

Curriculum—5-year-old Spanish-speaking children from low-income families who have completed the BECP, level III for 4-year-olds. A separate program (Bilingual K) is available for entering 5-year-olds.

Staff Development—Bilingual teachers and assistant teachers who are using the BECP, level III instructional materials. Staff development activities are conducted by the supervisor.

Parent Involvement—Parents and other family members whose children are enrolled in the BECP, level III.

GOAL(S) OR PURPOSE(S)

The major goals of the program are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects, the program moves sequentially from what the children know to what they do not know. Language and concept development is systematically incorporated throughout each instructional element. Concepts appear first in Spanish, then in English; content begins with concrete objects, moves to pictures and two-dimensional representations, and concludes with the use of words only. Within each skill level, the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

The program cannot be implemented effectively without the staff development product. The 5-day preservice workshop is essential along with continuing teacher training provided in the teacher's manuals. Details of teacher training are left to the supervisor.

The parent involvement product is implemented by the classroom teacher with assistance from the supervisor. Use of this product is optional.

ASSESSMENT PROVISIONS

Instructional Materials—Curriculum-based, criterion-referenced unit and mastery tests are provided to enable the teacher to monitor each child's progress.

Staff Development—Mastery questions keyed to each teacher's manual are provided as a guide to reading and to enable the supervisor to assess teachers' understanding of the materials.

Parent Involvement—There are no provisions for assessment.

TIME REQUIREMENTS

Instructional Materials—1 school year in an all-day program. Adaptation is provided for half-day programs which may not complete all 20 units. The curriculum has also been used in migrant programs which do not meet for a complete school year.

Staff Development—Five days is the absolute minimum for the preservice training; 10 or more days are recommended. In addition, at least 2 hours per week of inservice training is recommended. Teachers also require at least 45 minutes per day for planning and preparation.

Parent Involvement—There is no time requirement. Home activities take from 10 to 15 minutes.

IMPLEMENTATION PROCEDURES

1. Not more than 25 children should be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.
6. The local supervisors will participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.
7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so that the teaching team can plan together.

Personnel Required for Product Adoption and Implementation

The BECP, level III is designed to be taught by a professional teacher and a paraprofessional assistant teacher, both of whom are bilingual. The parent involvement product is also implemented by this teaching team.

The staff development product is implemented by a supervisor of teachers. Field test supervisors have a variety of backgrounds and training. It is recommended that staff development supervisors obtain the site staff development materials and attend a workshop for supervisors conducted by the publisher.

ASSURANCES AND CLAIMS

Assurances

There have been neither reports nor complaints of harm or damage resulting from the use of the BECP, level III curriculum. This assurance is supported by feedback from teachers in 34 field test classrooms and from field test results. The harmlessness of using the bilingual approach to teach Spanish-speaking children is demonstrated by those pupils enrolled in the field test version of this program who performed as well as monolingual English speakers on standardized tests.

No complaints relating to social, sexual, racial, or other biases have been received from teachers using either the field test or the revised published version. Although there have been no complaints, the materials do make use of the generic "he" to refer to the child and "she" to refer to the teacher.

In the field test, 34 classrooms implemented the program with developer assistance for the staff development component only. An additional 16 classrooms have installed the revised published program with no developer assistance.

Claims

Children enrolled in field test classes made significant gains from pretest to posttest on a standardized measure of general cognitive functioning. Some children outperformed an English-speaking comparison group on this measure. Nonmigrant pupils demonstrated a significant gain in positive attitudes toward school on a measure of school attitudes. An attitude inventory administered only to migrant pupils indicated pupil satisfaction with all but one aspect measured by the inventory. A user satisfaction questionnaire administered to field test teachers indicated, with few exceptions, general satisfaction with the program. Subsequent to field testing, program revisions were made to improve the product's effectiveness. Data from the revised published version are not available.

The BECP, level III curriculum was developed according to the product development process used by SEDL. This process includes the following stages: (1) Context analysis, (2) conceptual design, (3) product design and design test, (4) pilot test, (5) field test, and (6) dissemination. At each stage, the product is evaluated and revised. The published version contains revisions indicated by results from the field test. Since the initial product design, the product has been tested over a 4-year period in a total of 63 classrooms.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set: English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, home activities for parents, *Paso a Paso*	1 set per classroom	792.00	Reusable	
Teacher staff development manuals		52.00	Reusable	
Site staff development (manuals, tapes, filmstrips)*		108.00	Reusable	
Home Activities for Parents	1 per family	8.00	Consumable yearly	
English manuals		92.00	Reusable	
Spanish manuals		84.00	Reusable	
Paso a Paso (3 records and manual)		17.00	Reusable	

*Not included in classroom set.
Note: Add 5 percent for shipping unless approval is expressly indicated on purchase order to ship collect.

DEVELOPER/AUTHOR:

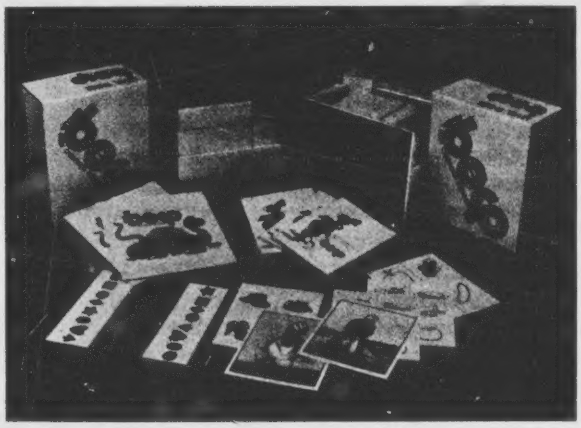
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedlar, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

Complete classroom sets including teacher's manuals, site staff development sets including the administrator's handbook and the supervisor's manual; and optional home activities for parents are available from the National Educational Laboratories Publishers, Inc.

The product was copyrighted in 1974 by Southwest Educational Development Laboratory, and it becomes public domain in 1978. The distributing organization is:
National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702



INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL III, INSTRUCTIONAL MATERIALS

A developmentally oriented program for 5-year-old Spanish-speaking children, concerned with mastery of skills and concepts in eight major areas

The *Bilingual Early Childhood Program* (BECP), *Level III, Instruction Materials* guides are designed for use with 5-year-old Spanish-speaking children. The program is developmentally oriented, concerned with the general cognitive, psychomotor, and affective stages common to all children. It emphasizes mastery of skills and concepts in eight major areas—visual, auditory, motor, ideas and concepts, syntax of English, vocabulary, prewriting, and exploring and discovering. Activities involving these content or skill areas are organized into 20 instructional units built around a single theme or topic such as community helpers and transportation. The activities are carefully sequenced and integrated to complement and reinforce each other by relating to the unit topic or to a particular skill. Each unit includes 20 to 35 lessons and activities, teacher guidebooks in Spanish and in English, materials and media for the activities, and curriculum-based unit and mastery tests. Unit topics are designed to relate meaningfully to the children's previous experiences while expanding their skills and abilities in new situations. Activities begin with lower order skills and proceed systematically to higher level tasks. Spanish is the language of instruction for the first part of the program, and Spanish continues to be used throughout. Once the children have mastered concepts and skills in Spanish, the same concepts are systematically introduced in English. The class is divided into three or four small groups which cycle through alternating periods of direct instruction, assigned independent activities, and self-selected activities. The instructional materials are to be taught by a bilingual teacher and a bilingual assistant teacher. Activities and procedures have been designed to promote satisfying interactions between teacher and learner so that the children can develop their full intellectual and personal potential and can learn to function comfortably and competently in two languages.

SUBJECT AREA(S)

Each of the 20 instructional units contains 20-35 planned lessons and activities utilizing puzzles, transparencies, filmstrips, audiotapes, games, line drawings, posters, and photographs. Unit content has been designed to build upon the children's prior knowledge while introducing new concepts. The units familiarize the children with concepts in several kinds of lessons and promote their application to various contexts to assure transfer and generalization of learning. For example, the concept of color is introduced in the visual element in early units through simple matching exercises. In later units, color labels are taught in a strand of auditory activities. The concept of color is reinforced in the Ideas and Concepts element where the children are expected to describe or classify objects according to color. Each unit is available in Spanish and English. Unit topics are as follows:

Unit 1: School (La Escuela)
Unit 2: School Safety (Seguridad en la Escuela)
Unit 3: Community Helpers (Ayudantes de la Comunidad)
Unit 4: Community Helpers (Ayudantes de la Comunidad)
Unit 5: Self-Concept (Concepto de Sí Mismo)
Unit 6: Body Senses (Los Sentidos del Cuerpo)
Unit 7: Clothing (La Ropa)
Unit 8: Food (La Comida)
Unit 9: Health (La Salud)
Unit 10: Toys (Los Juguetes)
Unit 11: Family (La Familia)
Unit 12: Classroom Environment (Ambiente de la Sala de Clase)
Unit 13: Community Environment (Ambiente de la Comunidad)
Unit 14: Transportation (Los Transportes)
Unit 15: Materials (Materiales)
Unit 16: Plants (Las Plantas)
Unit 17: Animals (Los Animales)
Unit 18: School (La Escuela)
Unit 19: Self-Awareness (Conciencia de Sí Mismo)
Unit 20: Checklist (Inventario)

INTENDED USERS AND BENEFICIARIES

Five-year-old Spanish speakers from low-income families who have completed the BECP, level III, are the intended users, BECP, level III, is not appropriate for entering 5-year-olds, for whom a separate program (Bilingual K) has been developed.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To develop the child's sensory-perceptual skills, (2) to develop the child's language skills in both English and Spanish, (3) to develop the child's thinking and reasoning abilities, and (4) to help the child develop a positive self-concept.

PATTERNS OF USE

In all its aspects the BECP, Level III,moves sequentially from what the children know to what they do not know. Language and concept development are systematically incorporated throughout each instructional element. Concepts appear first in Spanish, then in English; content begins with concrete objects, moves to pictures and two-dimensional representations, and concludes with the use of words only. Within each skill level, the children build gradually, in small steps, adding new skills or learning new applications for skills acquired in other contexts. Because of the systematic buildup and integration of skills, it is essential that the instructional units be presented in order.

ASSESSMENT PROVISIONS

The BECP, Level III,contains the following curriculum-based orientation referenced tests: Unit tests to assess the child's ability to meet the objectives of unit activities and mastery tests to assess the child's mastery of concepts and skills over an eight-unit interval. Pretests and posttests are also included.

TIME REQUIREMENTS

One school year in an all-day program is required. Adaptation is provided for 1/2-day programs which may not complete all units. The curriculum has also been used in migrant programs which do not meet for a complete school year.

IMPLEMENTATION PROCEDURES

1. No more than 25 children should be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. (The activities may be taught in either English or Spanish, but their sequencing and difficulty may not be appropriate for native English speakers.)
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. It is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms.
6. The local supervisors should participate in a 7- to 10-day preservice workshop designed to train them to install the program and to conduct preservice and inservice teacher training.
7. A 5-day preservice workshop for teachers should be held at each site before instructional activities begin. Materials for the workshop are provided.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Two to three hours per week should be allotted for teacher inservice training. In addition, teachers and assistant teachers should have at least 45 minutes per day for planning and preparation. This time must be scheduled so the teaching team can plan together.

Personnel Required for Product Adoption and Implementation

The instructional activities require a bilingual teacher and a bilingual assistant teacher for each classroom, and a supervisor for each 10 classrooms.

ASSURANCES AND CLAIMS

The BECP, Level III,was tested over a 5-year period in rural and urban classrooms in which children from Spanish-speaking homes were enrolled. These classrooms included a high concentration of children from low-income families. Children of migrant agricultural workers have also participated in the program. Extensive feedback was collected from teachers, supervisors, and others working with the program; there have been no reports of harm or damage to children caused by participation in the curriculum.

The instructional materials were designed to be relevant to the cultural, social, and linguistic experiences of Spanish-speaking children, particularly Mexican-American children of the Southwest. The program has also been implemented in several northern and midwestern cities where there are a large number of Puerto Rican children. Data have not been collected on the use of the program for middle-income children or native English speakers. The materials make use of the generic "he" to refer to the child and "she" to refer to the teacher.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set: English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, *Home Activities for Parents, Paso a Paso*	1 set per classroom	594.00	Reusable	
English manuals		69.00	Reusable	
Spanish manuals		63.00	Reusable	
Paso a Paso (3 records and manual)		12.75	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Director
Joyce Evans, Program Coordinator

AVAILABILITY

This product was copyrighted in 1974 by Southwest Educational Development Laboratory. It becomes public domain in 1979. The distributor is:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 018

BILINGUAL EARLY CHILDHOOD COMPONENT, LEVEL III STAFF DEVELOPMENT

A comprehensive model for teacher training, both preservice and inservice

The *Bilingual Early Childhood Component, Level III, Staff Development*, is a comprehensive model for teacher training, both preservice and inservice. It contains five teacher's manuals, accompanying filmstrips, a supervisor's manual, and an administrator's handbook. Three of the teacher's manuals form the basis for a preservice workshop conducted by the supervisor. This workshop is a comprehensive introduction for new teachers. It includes filmstrips which demonstrate model lessons and classroom arrangements. The workshop is performance based, emphasizing demonstration, role playing, and practicing of teaching skills. The supervisor's manual contains detailed instructions for conducting the workshop, including grouping and pairing of teachers, leading discussions, providing feedback, and adapting the workshop to meet the needs of more experienced teachers. The supervisor's manual also contains guidelines for implementing a bilingual preschool program, including instructions for hiring and supervising teachers, providing resources for teachers, observing in the classroom, and performing other administrative and supervisory functions.

Continuing inservice teacher training is provided through the use of the remaining two teacher's manuals. These manuals cover such topics as teacher expectations, incidental learning and modeling, adapting the program to meet children's individual needs, and effective use of equipment in a bilingual preschool program. Detailed instructions for conducting inservice training are included in the supervisor's manual.

SUBJECT AREA(S)

Staff development materials include several hours of demonstration filmstrips on classroom and lesson preparation, lesson presentation, and testing, plus the following manuals and booklets:

1. Administrator's handbook: Overview of the program and information for superintendents, principals, and other school administrators.
2. Supervisor's manual: How to conduct the performance-based preservice teacher training workshop.
3. Preservice manaul—volume 1: How the curriculum elements fit together, rationale and goals underlying the entire program and each of the individual elements; general program information, teacher roles and responsibility, classroom organization and management; and lists of basic early childhood equipment.
4. Preservice manual—volume 2: Detailed information about small-group instruction; sample visual, auditory, motor, ideas and concepts, and syntax of English lessons; how to prepare and administer unit and mastery tests; how to use test information to plan remedial teaching; how to organize the classroom and plan activities so that control and discipline problems are minimized.
5. Preservice manual—volume 3: How to set up and equip various learning centers in the preschool classroom.
6. Inservice manual—volume 1: Practical suggestions for setting up effective learning situations and for responding to children in various situations, how teacher attitudes and expectations can influence success and failure in the classroom, how to teach through example and modeling in addition to more formal instruction, and what to do when a child does not meet the objective of a lesson.
7. Inservice manual—volume 2: How to demonstrate the uses of manipulative equipment to the children and how to help the children learn to use the equipment independently.

INTENDED USERS AND BENEFICIARIES

Administrators, supervisors, teachers, and assistant teachers of Spanish-speaking 5-year-olds are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

Preservice training goals are: (1) To train the teacher in setting up a preschool classroom for maximum program effectiveness; (2) to instruct the teacher in methods of demonstrating and teaching with classroom materials and equipment; (3) to develop teacher skills in classroom assessment of children's learning; (4) to demonstrate and simulate ways of instructing young children; and (5) to assist the teacher in planning, scheduling, and managing classroom activities.

Inservice training goals are: (1) To instruct the teacher in ways of identifying and assisting children who demonstrate problems in learning, (2) to develop the teacher awareness of the ways children learn from modeled behavior, (3) to develop teacher awareness of the effect of negative and positive expectations on the behavior of children, and (4) to further develop the teacher's ability to maximize the learning which can occur through the use of classroom materials.

PATTERNS OF USE

The preservice training manuals are designed to be used with the accompanying filmstrips in a preservice workshop conducted by the supervisor. The preservice training model provided in the supervisor's manual details essential activities, although the actual structure of the workshop is left to the supervisor.

The inservice manuals are designed to be used as part of a continuing program of teacher training, the specific application of which is a supervisory function.

ASSESSMENT PROVISIONS

There is no formal testing. Teacher evaluation is an ongoing part of the supervisor's activities with observational checklists provided.

The preservice training model workshop is heavily performance based in its methods and objectives.

One implication of the performance-based aspect of the workshop is accountability. Participants are expected not merely to read about and discuss their roles in the program, but also to show that they understand and can perform the behaviors associated with those roles. They practice teaching lessons, giving equipment demonstrations, making out schedules, planning related activities, making smooth transitions, and setting up their classrooms.

The supervisor's manual contains mastery questions for each of the teacher manuals to assess the teacher's understanding of the material presented. It also contains guidelines for using the mastery questions to enhance teacher learning.

TIME REQUIREMENTS

The preservice workshop requires a minimum of 5 days, 6 hours per day. The inservice training is an ongoing activity consisting of 2 to 3 hours of training per week throughout the school year. In addition, the teacher-assistant teacher team should have a minimum of 45 minutes each day to plan for the following day.

During the first part of the year, the supervisor visits the classrooms approximately 1-1/2 to 3 hours per week to observe.

IMPLEMENTATION PROCEDURES

The requirements for effective presentation and use of the staff development product are as follows:

1. During the first year of the program, it is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms to assist with regular and continuous staff development.
2. The local supervisor will participate in a 7- to 10-day preservice workshop for supervisors, designed specifically to train them to install the program and to conduct preservice and inservice teacher training.
3. A 5-day preservice workshop for teachers will be held at each site before instructional activities begin.
4. Staff development supervisors should spend approximately 1-1/2 to 3 hours each day observing in classrooms.
5. Teachers should be given 2 or 3 hours per week for inservice training, as well as daily planning time.

ASSURANCES AND CLAIMS

The staff development product has been used only in sites where the *Bilingual Early Childhood Program, Level III*, was conducted. No reports of harm or damage to teachers or children resulting from use of these activities were received.

All materials in the program, including the staff development materials, were designed to be relevant to the cultural, social, and linguistic experiences of Spanish speakers. It is recognized, however, that teachers may or may not share these experiences, and the teacher materials do not assume a particular background or heritage. The generic "she" is used to refer to the teacher and the supervisor, and "he" is used to refer to the child.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher staff development manuals		39.15	Reusable	
Site staff development manuals, filmstrips, tapes		81.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

Complete staff development materials are available as part of the *Bilingual Early Childhood Program, Level III,* as well as separately.

The product was copyrighted in 1973 by Southwest Educational Development Laboratory. It becomes public domain in 1978. It is available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

829

RD 110 019

PARENT INVOLVEMENT III

A system of parent activities to be used at home to reinforce what the children learn in school

The *Parent Involvement III* is comprised of the following materials: A teacher's manual, *School and After: Parents Help;* a filmstrip with audio recording, *School and After: Parents Help;* and a parent manual, *Home Activities for Parents*, containing 60 individual learning activities written in Spanish and English.

Recent work with low-income parents indicates that they are as equally concerned about their children's education as are more advantaged parents. However, because of their limited education, resources, and power in the community, low-income parents often do not know how to maximize their children's educational experiences. The parent involvement product is designed to assist parents in these areas by involving parents as partners in the task of helping each child reach his potential. The parent involvement product provides information and resources that will help parents to accomplish this task successfully.

No early childhood education program can fully achieve its goals without support from parents. Therefore, the parent involvement product includes parent involvement materials designed for use at home to reinforce what the children have learned in school. Parents learn specific skills so that they feel secure in their own knowledge and can develop greater interest in their children's work. To develop vocabularies and concepts through communication, parents are encouraged to emphasize conversation with their children. The importance of language and communication with adults as the basis for intellectual development is stressed.

More than 100 individual parent activities include pictures, games, and stories which can be used easily in the home. Normal situations are emphasized—cooking dinner or walking to the bus stop can be turned into educational experiences. The product seeks to establish in the parents a positive expectation of the child's ability to achieve. This can greatly accelerate a child's success at school.

SUBJECT AREA(S)

Parent Involvement III has two major functions or elements. The first element is involving parents in the school setting, and it is carried out by the teacher, supervisor, or parent involvement agent to insure that the goals of the program are met. These activities include: (1) Making home visits to meet the children and the parents before school begins, (2) conducting an orientation meeting at school for parents, (3) organizing a Parent Advisory Committee (PAC), (4) involving parents in classroom observation, (5) involving parents as participants in classroom activities, and (6) involving parents in field trip activities.

The second function is the home activities element, designed to help parents become more effective teachers of their preschool children. The purpose of this element is to develop the parents' awareness of their teaching roles and to encourage their participation in the formal education of their children.

INTENDED USERS AND BENEFICIARIES

Five-year-old Spanish-speaking children and their parents are the intended users.

Although designed primarily for 5-year-old Spanish-speaking children and their parents, the program has also been used with English speakers. The developers rate its use with English speakers as "successful," but field test data supporting this claim have not been collected due to lack of funding.

GOAL(S) OR PURPOSE(S)

Parent Involvement III has three goals: (1) To initiate and maintain positive attitudes, interaction, and understanding between home and school regarding early childhood education and parent involvement; (2) to increase the parent's knowledge of community resources and facilities and how these can be used to help meet their needs; and (3) to inform the parents of their children's learning experiences in school.

PATTERNS OF USE

Unit packets are sequential and cumulative, providing a complete program. The activities may also be used independently.

ASSESSMENT PROVISIONS

There is no formal testing. The home activities that the parents do with the child reinforce what the child has learned at school.

TIME REQUIREMENTS

Completion of each home activity in the parent's manual requires approximately 10-15 minutes. Of course, parents are free to spend the amount of time they feel is necessary for each activity. The home activities continue throughout the school year.

The parent advisory committee meets once a month throughout the year.

IMPLEMENTATION PROCEDURES

Strategies for implementation of *Parent Involvement III* include: (1) Home visits made by the teacher or the parent involvement agent, (2) orientation meeting for parents conducted at the school, (3) organizing a parent advisory committee, (4) involvement of parents in classroom observation, (5) involvement of parents as participants in classroom activities, (6) involvement of parents in field trip activities, (7) conducting an orientation to the parent education element, and (8) giving demonstration sessions for home activities.

ASSURANCES AND CLAIMS

There have been no reports of harm or damage to children or families caused by the use of these materials. The materials have been used only in conjunction with the *Bilingual Early Childhood Program, Level III*, but examination of the activities suggests that they are applicable to a variety of settings. The materials are designed for use with Spanish-speaking families, and no data are available either to support or discourage their use with English-speaking families. The materials do not appear to promote any social, sexual, or racial biases, and no complaints of this nature have been received. The printed materials use the generic "he."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Home Activities for Parents	1 per family	6.00	Consumable yearly	

DEVELOPER/AUTHOR:

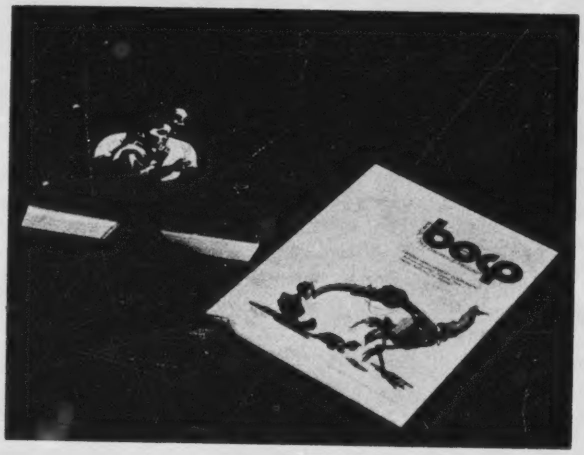
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Director
Joyce Evans, Program Coordinator

AVAILABILITY

This product was copyrighted in 1974 by Southwest Educational Development Laboratory. It becomes public domain in 1979. The distributor is:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 020

PASO A PASO CON LOS NINOS (PART OF THE EARLY CHILDHOOD PROGRAM)

A collection of songs and dances which can supplement any preschool program

Paso a Paso con los Niños is a collection of 46 traditional Mexican songs and dances. This collection has been specifically adapted for young children.

Paso a Paso con los Niños consists of a manual and a set of three records. The manual includes the words for the songs and games as well as directions and diagrams for performing the games and dances. It is also illustrated with color photographs of young children. A set of three records accompanies the manual. All of the 46 songs and dances are accompanied by authentic Mexican music.

This collection of songs and dances can be used as a supplement to any preschool program or as part of *Bilingual Early Childhood Program, Level I, Bilingual Early Childhood Program, Level II, Bilingual Early Childhood Program, Level III*, and *Bilingual Kindergarten System*.

SUBJECT AREA(S)

Paso a Paso con los Niños, a collection of traditional Mexican songs, games, and dances, includes:

Canciones y Juegos (Songs and Dances)
- A pares y nones
- Don Pirulí
- El Patio de mi casa
- En el agua clara
- La rueda de San Miguel
- La víbora de la mar
- Los patitos
- Los pollitos
- Las mananitas Mexicanas
- Matarili rili ron
- Naranja dulce
- San Serafín del monte
- A Madrú señores
- Al ánimo

Bailes (Dances)
- Cielito lindo
- Danza de los viejitos
- El jarabe taptío
- Jesusita en Chihuahua
- La bamba
- La raspa
- La varsoviana
- La zandunga

Canciones y juegos (songs and games)
- Caballito blanco
- ¿Cuánto me das marinero?
- El sapito
- Dõna Blanca
- El acitrón
- El conejo
- El patito
- Hilitos, hilito de oro
- Juan pirulero
- La burrita
- La muñeca vestida de azul
- La pájara pinta
- La paloma azul
- La viudita
- Los diez perritos
- Las mananitas tapatías
- Que lleuva, que lleuva
- Soy cojo de un pie
- Vecina, vecina mía
- De México ha venido
- Las posadas
- Los maderos de San Juan
- Mambrú

INTENDED USERS AND BENEFICIARIES

Intended users are 3-, 4-, and 5-year-old Spanish-speaking children, their teachers, and parents.

GOAL(S) OR PURPOSE(S)

Paso a Paso con los Niños is intended to enhance the children's cultural awareness and identification.

PATTERNS OF USE

Supplementary manual and records provide songs and dances to be used as desired by parents, teachers, and children.

ASSESSMENT PROVISIONS

There is no formal testing. Success is measured by the amount of enjoyment and cultural awareness the children receive.

TIME REQUIREMENTS

The individual songs last from 3 to 7 minutes. On the three long-playing records, each side plays for 17 minutes.

IMPLEMENTATION PROCEDURES

Because the *Paso a Paso con los Niños* manual is complete with words, "how to" instructions, and diagrams, the implementation is carried out by the teacher, parent, or supervising adult without special training or equipment.

ASSURANCES

The materials reflect culture fairness and no negative cultural bias. The product has been used in approximately 25 States, in Latin America, and Colombia, South America.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Paso a Paso including 3 records and 1 manual	1 set per classroom	12.75	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedlar, Program Coordinator

AVAILABILITY

Copyright was obtained in 1973 and is held by Southwest Educational Development Laboratory. It becomes public domain in 1978. The distributor is:

National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

Paso a Paso con los Niños

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL KINDERGARTEN SYSTEM

A comprehensive multimedia program to make Spanish-speaking preschool children functionally bilingual

The *Bilingual Kindergarten System* is a comprehensive multimedia program for the Spanish-speaking preschool child. Materials are designed not merely to teach the child English, but to help the child become functionally bilingual—to teach the child English while strengthening the Spanish-language skills already acquired. The program is a total learning system which includes the following products: Isntructional materials (8 instructional manuals—4 in English and 4 in Spanish; all related media); staff development (7 manuals and 11 filmstrips with audiorecordings); and parent involvement (1 teacher's manual, filmstrip with audiorecording, and 60 individual learning activities).

The general goals of the program are: (1) To develop the child's basic motor, visual, and auditory abilities; (2) to develop the child's total language skills in both English and Spanish; (3) to develop the child's general knowledge and thinking and reasoning abilities; and (4) to help the child in developing a positive self-concept.

To achieve these goals, the program provides more than 600 activities covering 7 basic areas: (1) visual training, (2) auditory training, (3) motor training, (4) prewriting, (5) ideas and concepts, (6) syntax of English, and (7) building vocabulary. An additional manual of mathematics activities supplements the basic program. These activities are organized into 12 units or themes. Activities in each unit complement and reinforce one another by being related to the unit topic or to a particular skill. All activities are written in both English and Spanish for small groups of 6-8 pupils with an optimum class size of 25-30. The program provides activities for either a total schoolday or for 1/2-day programs.

Because the product uses small-group instruction and because curriculum guides are written in both English and Spanish, children may be grouped by language fluency and learning ability so that each child can develop at an individual pace.

An optional product, *Home Activities for Parents*, in English and in Spanish, enables parents to participate fully in the education of their children.

In the *Bilingual Kindergarten System*, every activity has been tested for 4 years with thousands of children; and children who have used the product show superior performance on standard tests in perceptual, cognitive, and language-comprehension development. Teachers who have used the product give high ratings (ease of use, pupil interest) to materials and most report a desire to continue using the product.

SUBJECT AREA(S)

The seven basic training areas (visual, auditory, motor, prewriting, ideas and concepts, syntax of English, and building vocabulary) are covered in activities throughout the 12 units of the program.

The 12 units of *Bilingual Kindergarten System* are organized around a topic or theme. Each unit theme is both relevant to the child's background and significant to growth and development. Units are arranged sequentially by theme: The product begins with an orientation to school and progresses through units on the self and the family to units on the neighborhood and the extended environment. The unit topics are as follows: (1) School (la escuela), (2) body awareness (conciencia del "yo" fisico), (3) self-concept (concepto de si mismo), (4) clothing (la ropa), (5) food (la comida), (6) family and home (la familia y la casa), (7) community helpers (los ayudantes de la comunidad), (8) transportation (los transportes), (9) community environment (ambiente de la comunidad), (10) animals (los animales), (11) natural environment (la naturaleza), and (12) what I have learned (lo que he aprendido).

INTENDED USERS AND BENEFICIARIES

Although designed primarily for 5-year-old Spanish-speaking children, their teachers and parents, the product has also been used with English speakers. The developers rate its use with English speakers as "successful," but field-test data supporting this claim have not been collected due to lack of funding.

GOAL(S) OR PURPOSE(S)

Bilingual Kindergarten System is a total learning system encompassing the following goals: (1) To help children become functionally bilingual; (2) to strengthen their ability to communicate in Spanish; (3) to learn English syntax and vocabulary; (4) to enhance self-concept through successful experiences, self-evaluation, and self-acceptance; (5) to develop general knowledge of home, neighborhood, and extended environment; (6) to develop basic auditory, motor, and visual abilities; (7) to learn to identify and solve problems, and to think and reason; (8) to work independently; and (9) to use multimedia materials to involve them in an enjoyable learning experience.

PATTERNS OF USE

Units and materials are sequential and cumulative, providing a complete program. A supplementary manual and records are provided for songs and dances (Paso a Paso). A supplementary manual is provided for teaching mathematical concepts.

ASSESSMENT PROVISIONS

The system is a product of Southwestern Educational Development Laboratory's (SEDL) systematic process of educational development. The process begins with context analysis (a study of needs) and moves through design testing, pilot testing, and field testing to diffusion to the children of the Nation. Revision, based on feedback gathered from teachers, plays a major part throughout the process. This product was systematically refined after design test and pilot test, and again after the more advanced field test.

SEDL's process of eeucational development insures that a product, such as *Bilingual Kindergarten*, reaches the marketing stage only after extensive testing and proven effectiveness.

The program was first implemented in 1969-70 at the Good Samaritan Center and at the Edgewood Independent School District in San Antonio, Texas, with urban Mexican-American children. During 1970-71, the materials were tested with migrant children as well as with urban Mexican-American populations. Since then more than 3,000 children have participated in pilot-test and field-test activities, including both rural and urban pupils in monocultural and multicultural settings. Through the cooperative efforts of teachers, administrators, and school superintendents, the program materials have been revised by SEDL staff to meet the needs of children of the target population.

On the auditory test of language comprehension, children made significant gains between the pretests and posttests on both the English and Spanish versions.

On the Raven progressive matrices, a nonverbal measure of general intellectual development, children using the program made significantly greater gains than those in comparison groups, indicating superior perceptual and cognitive development.

On criterion-referenced tests, 75 percent or more of the children successfully mastered the objectives of the visual, auditory, prewriting, and ideas and concepts elements.

A pretest, 3 mastery tests, and 11 unit tests are included in a separate manual. Each test includes instructions for administering the test in either Spanish or English, a list of materials needed, scoring grids, and a list of lessons to be reviewed or retaught following test administration.

Teachers responding to a user questionnaire rated ease of use of materials and pupil interest highly, and 87 percent reported desire to use the product again.

Teacher evaluation is an ongoing part of the supervisor's activities with observational checklists provided.

Instructional materials include a pretest before beginning the program, criterion-referenced tests to follow each unit, and posttests. Mastery tests are included at the end of each three units.

TIME REQUIREMENTS

The *Bilingual Kindergarten System* provides activities for a full school year, and these activities can be geared either for a total schoolday or for 1/2-day programs. The pupil instructional materials are divided into 12 units of approximately 53 activities per unit. Each unit is designed to be used for a 2- to 3-week period. Each activity within a unit is designed to be taught for approximately 15-20 minutes.

IMPLEMENTATION PROCEDURES

The requirements for the effective use of the *Bilingual Kindergarten System* are as follows:

1. No more than 35 children may be enrolled in each class.
2. Children should be from economically disadvantaged backgrounds.
3. The dominant language of a majority of each class should be Spanish. Activities assume that the children are native Spanish speakers. They extend the Spanish of these children and at the same time teach them English as a second language; they do not, however, teach Spanish to English speakers, and their sequencing and difficulty level may not be appropriate for native English speakers.
4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.
5. During the first year of product use, it is strongly recommended that 1 full-time supervisor be assigned for each 10 classrooms to assist with regular and continual staff development. At sites operating with fewer than 10 classrooms, 1 person will usually be designated as the supervisor. Larger sites will need additional supervisors who will work under the direction of the head supervisor (such as site coordinator or program head).
6. The local supervisor will participate in a 7- to 10-day preservice workshop for supervisors, designed specifically to train them to install the program and to conduct preservice and inservice teacher training. This workshop is held in the summer, usually in July, before the workshops at local sites have begun.
7. A 5-day preservice workshop for teachers will be held at each site before instructional activities begin.
8. Staff development supervisors generally will spend approximately 1-1/2 to 3 hours each day observing in classrooms.
9. Teachers should be given 2 or 3 hours per week for inservice training. In addition, teachers and assistant

teachers should have a minimum of 45 minutes per day to plan their activities for the following day. This planning must be scheduled so that each teaching team can plan together.

If the product is to work, it is critical that staff members be thoroughly familiar with the goals and objectives of the product model. The laboratory strongly recommends that an orientation concerning the *Bilingual Kindergarten System* be held for staff members teaching in the local school. Working with young children will be a new experience in many schools, and all personnel need to know the special needs of young children. Experience has shown that total staff involvement contributes greatly to a successful program and minimizes misunderstandings and difficulties.

In addition to the training provided in the staff development component of the product, training is provided to sites through other divisions of the laboratory. Field relations and dissemination has a commitment to provide preservice and inservice training to the national demonstration sites. The migrant division provides training to 14 Texas school districts with a total of 1,440 5-year-olds participating in the system. Each school district contracts separately for the amount of training it desires.

The followthrough division provides training to followthrough sites in 4 school districts involving 818 5-year-olds; to California migrant sites in 6 congressional districts involving approximately 1,000 5-year-olds; and to 2 title VII programs involving 120 5-year-olds. In each case, the training is contracted by the site.

The National Educational Laboratories Publishers, Inc. (NELP), provides preservice training to all districts that purchase the program directly from the publisher. The training workshop usually lasts 4 days and is given during the summer. NELP offers this once-a-year training free of charge, with the individual districts paying travel expenses for their participants.

Personnel Required for Product Adoption and Implementation

The *Bilingual Kindergarten System* requires both a bilingual teacher and a bilingual assistant teacher for each classroom and a supervisor for each 10 classrooms.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

The *Bilingual Kindergarten System* has been used by more than 3,000 pupils during pilot-test and field-test activities. Formative and summative data obtained from selected sites using the program during the multiyear developmental process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

Assurances of Social Fairness

The materials have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the approval process, the materials were made available for critical review by both professional and special interest groups. Testimony, solicited by the State textbook committee in open hearings, indicated that the product contained no materials considered to be biased toward any ethnic, sex, or cultural group.

Assurances of Replicability

The *Bilingual Kindergarten System* was field tested with both migrant and nonmigrant 5-year-olds during 1972-73. Approximately 2,000 native Spanish speakers in a 3-State area, representing urban and rural locales, were involved in this field test. Detailed staff development materials developed for the curriculum in conjunction with preservice training provided adequate information for classroom implementation of the materials.

Claims of Careful Product Development

The *Bilingual Kindergarten System* is a product of the curriculum development process used by the Southwest Educational Development Laboratory (SEDL) for systematic design, testing, and refinement of curriculum systems. The aim of the development process is the creation of worthwhile educational innovations of proven effectiveness. Before publication in late 1973, it was implemented for 4 years with more than 3,000 pupils in a 3-State area.

Claims of Effectiveness

Field-test data from migrant and nonmigrant sites indicated that pupil mastery of the curriculum was high. With the exception of one curriculum element at one migrant site, a criterion level of 75 percent mastery was reached on all curriculum elements at all migrant and nonmigrant sites.

Although standardized test batteries varied between sites because of site goals, results were favorable to project pupils. At both migrant and nonmigrant sites, project pupils scored significantly higher than comparison pupils on the TOBE general concepts test. Nonmigrant project pupils also scored significantly higher than comparison pupils on the metropolitan readiness test. Migrant pupils did not receive this test. Nonmigrant pupils also scored significantly higher than comparison pupils on the SCAMIN, a measure of self-concept and academic motivation. Although migrant pupils did not receive the SCAMIN, pupil responses to the pupil attitude inventory at these sites indicated positive affective reaction toward classroom experiences.

In general, responses from teachers at all sites were favorable to the program. Data from a user questionnaire indicated that teachers found the *Bilingual Kindergarten System* to be appropriate and helpful to the target population. A large majority of teachers at each site expressed a willingness to teach the program again.

Claims of Replicability or Transportability

Since completion of field testing in 1973, 151 complete packages have been purchased for classroom use in 12 States. In addition to these complete packages of materials, another 132 partial packages have been purchased for classroom use or review prior to purchase. As a result of adoption by the Texas State Textbook Committee, significant increases in the dissemination of the product are expected in Texas during 1975-76.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set--English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, *Home Activities for Parents*, *Paso a Paso*	1 per classroom	420.00	Reusable	
English instructional manuals		36.00	Reusable	
Spanish instructional manuals		36.00	Reusable	
Teacher staff development manuals		24.00	Reusable	
Site staff development manuals,* tapes, filmstrips	1 per site	81.00	Reusable	
Home Activities for Parents	1 per family	6.00	Consumable yearly	
Paso a Paso (3 records and manual)		12.75	Reusable	

*Not included in classroom set.

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

The product carries a 1973 copyright by Southwest Educational Devlopment Laboratory and becomes public domain in 1978. It is available from the distributor:

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P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL KINDERGARTEN - INSTRUCTIONAL MATERIALS

A multimedia curriculum to teach 5-year-old Spanish-speaking children English while strengthening their present Spanish-language skills

The *Bilingual Kindergarten Instructional Materials* comprises a multimedia curriculum for the Spanish-speaking 5-year-old child. Materials are designed not merely to teach the child English, but to help the child become functionally bilingual—to teach the child English while strengthening the Spanish-language skills already acquired.

Pupil instructional materials are divided into 12 units of approximately 53 activities each, designed to be used for a 2- to 3-week period. Spanish and English curriculum guides accompany each unit. Multiple types of media are included for instructional activities (photographs, color drawings, filmstrips, audiorecordings, transparencies, games, posters, spirit duplicating masters, workcards, numeral cards, letter cards, color cards, and sets of geometric shapes in various colors and sizes).

Each unit includes overview of the unit; lesson activities; and special instructional multimedia materials (such as filmstrips, audiorecordings, puzzles, photographs, black-and-white and color drawings, and games).

Each activity, designed for approximately 15-20 minutes, includes: (1) An overview of the activity (such as behavioral objective, statement of purpose, list of materials required, material preparation, special instructions); and (2) a procedure with an easy-to-follow format of introduction, demonstration, interaction, conclusion, and expansion.

SUBJECT AREA(S)

The instructional materials specifically deal with the child's development in seven basic areas: (1) Visual training, (2) auditory training, (3) motor training, (4) prewriting, (5) ideas and concepts, (6) syntax of English, and (7) building vocabulary.

These 7 areas are covered in more than 600 activities in the curriculum. The activities are divided into 12 units of 50 to 55 activities each.

INTENDED USERS AND BENEFICIARIES

Five-year-old Spanish-speaking children, their teachers, assistant teachers, and parents are the intended users.

Although designed primarily for 5-year-old Spanish-speaking children, their teachers, and parents, the product has also been used with English speakers. The developers rate its use with English speakers as "successful."

GOAL(S) OR PURPOSE(S)

The instructional product is not merely a language curriculum. It is a total learning system with four general goals: (1) To develop basic visual, auditory, and motor skills; (2) to develop language skills in both English and Spanish; (3) to develop general knowledge and thinking and reasoning skills; and (4) to develop a positive self-concept in the child.

PATTERNS OF USE

Units and materials are sequential and cumulative, providing a complete program. A supplementary manual and records are provided for songs and dances (Paso a Paso). A supplementary manual is provided for teaching mathematical concepts.

ASSESSMENT PROVISIONS

The product procedures include a pretest, criterion-referenced tests to follow each unit session, and posttests. Unit tests assess the child's ability to meet the objectives of unit activities. Mastery tests, which assess the child's mastery of concepts and skills over a three-unit interval, are included at the end of each of the three units.

TIME REQUIREMENTS

The *Bilingual Kindergarten Instructional Materials* provides activities for a full school year, and these activities can be geared either to a total schoolday or to half-day programs. The pupil instructional materials are divided into 12 units of approximately 53 activities per unit. Each unit is designed to be used for a 2- to 3-week period. Each activity within a unit is designed to be taught for approximately 15-20 minutes.

IMPLEMENTATION PROCEDURES

The requirements for the effective use of the *Bilingual Kindergarten Instructional Materials* are as follows:

1. No more than 30 children may be enrolled in each class.

2. Children should be from low-income backgrounds.

3. The dominant language of a majority of each class should be Spanish. Activities assume that the children are native Spanish speakers. They extend the Spanish of these children and at the same time teach them English as a

second language; they do not, however, teach Spanish to English speakers, and their sequencing and difficulty level may not be appropriate for native English speakers.

4. Each class must have one teacher and one assistant teacher, both of whom should be bilingual.

Personnel Required for Product Adoption and Implementation

The curriculum requires both a bilingual teacher and a bilingual assistant teacher for each classroom and a supervisor for each 10 classrooms.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

The *Bilingual Kindergarten Instructional Materials* has been used by more than 3,000 pupils during pilot test and field test activities. Formative and summative data obtained from selected sites during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

Assurances of Social Fairness

The materials have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the approval process, the materials were made available for critical review by both professional and special interest groups. Testimony, solicited by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural group.

The *Bilingual Kindergarten Instructional Materials* was field tested with both migrant and nonmigrant 5-year-olds during 1972-73. Approximately 2,000 native Spanish speakers in a 3-State area, representing urban and rural locales, were involved in this field test. Detailed staff development materials developed for the curriculum in conjunction with preservice training provided adequate information for classroom implementation of the materials.

Claims of Effectiveness

Field test data from migrant and nonmigrant sites indicated that pupil mastery of the curriculum was high. With the exception of one curriculum element at one migrant site, a criterion level of 75 percent mastery was reached on all curriculum elements at all migrant and nonmigrant sites.

Although standardized test batteries varied between sites because of site goals, results were favorable to project pupils. At both migrant and nonmigrant sites, project pupils scored significantly higher than comparison pupils on the TOBE general concepts test. Nonmigrant project pupils also scored significantly higher than comparison pupils on the metropolitan readiness test. Migrant pupils did not receive this test. Nonmigrant pupils also scored significantly higher than comparison pupils on the SCAMIN, a measure of self-concept and academic motivation. Although migrant pupils did not receive the SCAMIN, pupil responses to the pupil attitude inventory at these sites indicated positive affective reaction toward classroom experiences.

In general, responses from teachers at all sites were favorable to the program. Data from a user questionnaire indicated that teachers found the product to be appropriate and helpful to the target population. A large majority of teachers at each site expressed a willingness to teach the program again.

Claims of Replicability or Transportability

Since completion of field testing in 1973, 151 complete packages have been purchased for classroom use in 12 States. In addition to these complete packages of materials, another 132 partial packages have been purchased for classroom use or review prior to purchase. As a result of adoption by the Texas State Textbook Committee, significant increases in the dissemination of the product are expected in Texas during 1975-76.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Complete classroom set—English and Spanish manuals, spirit masters, records, teacher staff development manuals, filmstrips, *Home Activities for Parents* *Paso a Paso*	1 per classroom	420.00	Reusable	
English instructional manuals		36.00	Reusable	
Spanish instructional manuals		36.00	Reusable	
Paso a Paso (3 records and manual)		12.75	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

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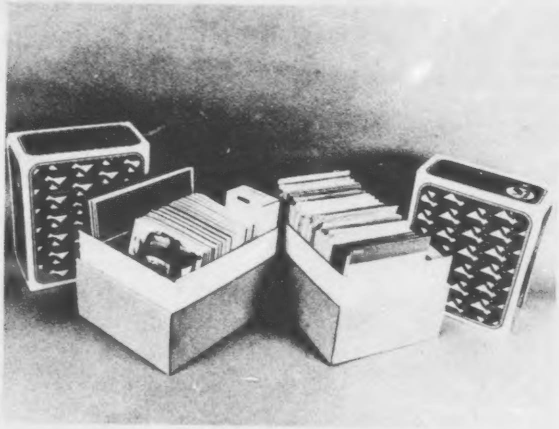

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 023

BILINGUAL KINDERGARTEN PARENT INVOLVEMENT

A program to aid parents in complementing the school experience

The *Bilingual Kindergarten Parent Involvement* is comprised of the following materials: A teacher's manual, a filmstrip with audiorecording, and a parents' manual containing 60 individual learning activities written in Spanish and English.

Recent work with low-income parents indicates that they are no less concerned about their children's education than are more advantaged parents. However, because of their limited education, resources, and power in the community, low-income parents often do not know how to maximize their children's educational experiences. This product is designed to assist parents in these areas by involving them as partners in the task of helping to assure that each child's potential is reached. The product provides information and resources that will help parents accomplish this task successfully.

No early childhood education program can fully achieve its goals without support from parents. Therefore, the product includes parent-involvement materials designed for use at home to reinforce what the children have learned in school. Parents learn specific skills so that they feel secure in their own knowledge and develop a greater interest in their children's work. To develop vocabularies and concepts through communication, parents are encouraged to emphasize conversation with their children. The importance of language and communication with adults as the basis for intellectual development is stressed.

More than 100 individual parent activities include pictures, games, and stories that can be used easily in the home. Normal situations are emphasized so that cooking dinner or walking to the bus stop turn into educational experiences. The product seeks to establish within the parents a positive expectation of the child's ability to achieve. This can greatly accelerate a child's success at school.

SUBJECT AREA(S)

The *Bilingual Kindergarten Parent Involvement* has two major functions or elements. The first element is involving parents in the school setting carried out by the teacher, supervisor, or parent-involvement agent to insure that the goals of the program are met. These activities include: (1) Making home visits to meet the children and the parents before school begins, (2) conducting an orientation meeting at school for parents, (3) organizing a parent advisory committee (PAC),(4) involving parents in classroom observation, (5) involving parents as participants in classroom activities, and (6) involving parents in field trip activities.

The second function is the home activities element, designed to help parents become more effective teachers of their preschool children. The purpose of this element is to develop the parents' awareness of their teaching roles and to encourage their participation in the formal education of their children.

Thus, parent education provides opportunities for parents to initiate and share learning experiences with their children. Orientation sessions and *Home Activities for Parents*, which complement the classroom instruction, have been developed for use by parents in improving their teaching skills with their child.

The parent education materials, *Home Activities for Parents*, have been designed to help parents become aware of everyday occurrences that can be converted into learning experiences. There are three types of home activites in the program: Those for which pictures are provided in the individual unit packets, those which request materials found in the home, and those which suggest topics of conversation.

Each home activity manual contains 20 units bound in looseleaf form. Each unit packet includes five activities written in both Spanish and English. Parents should begin presenting home activities to their children only after a particular concept has been taught in the classroom. Since the activities cover what has already been taught, the parents are not required to teach new material, but will review and reinforce what the child has already learned.

Other product materials include the teacher's manual, *School and After: Parents Help*, accompanied by a filmstrip and audiorecording. The manual details how to work with parents and how to enlist the aid of parents in helping each child reach full potential.

INTENDED USERS AND BENEFICIARIES

Five-year-old Spanish-speaking children and their parents are the intended users.

Although designed primarily for 5-year-old Spanish-speaking children and their parents, the program has also been used with English speakers. The developers rate its use with English speakers as "successful," but field test data supporting this claim have not been collected due to lack of funding.

GOAL(S) OR PURPOSE(S)

The parent involvement product has three goals: (1) To initiate and maintain positive attitudes, interaction, and understanding between home and school regarding early childhood education and parent involvement; (2) to increase the parents' knowledge of community resources and facilities and how these can be used to help meet their needs; and (3) to inform the parents of their children's learning experiences in school.

The first goal concerns attitude. Parents' interaction with the school is vital to their child's development and achievement. Parents must not feel that the school is interested in the family only when the child has done something wrong. If the parents avoid involvement with the school because of anxiety, hostility, or indifference, a remedy must be found. Through home visits and orientation sessions, parents and members of the school staff become better acquainted, thus initiating a cooperative working atmosphere between home and school.

The second goal of the product is to help parents meet their own basic needs. Children's development is often held back because of inadequate food, clothing, or housing. A child who comes to school hungry will have little energy for learning; a child who misses school because parents cannot afford clothes will fall behind in studies; a child who is continually uprooted because of housing problems will have difficulty developing and maintaining sound learning patterns and a close identification with a particular teacher or school.

Parents should know where to turn when problems such as these arise and outside help is needed. Social services which provide assistance for such family problems are available in most communities. If a parent is unfamiliar with these services, however, problems may persist indefinitely. Activities for achieving this goal of the program include a suggested social service survey and a parent advisory committee.

The third goal of the product is to acquaint parents with their child's experience at school. When parents show genuine interest in school and learning, children are almost certain to follow their example. It is important to let parents know what their children are doing; the parents' interest makes schoolwork more important and meaningful to the child. If parents visit the school, the child feels that home and school are part of the same experience. Most important, contacts between parents and teachers break down the barriers that sometimes separate the home and the school. Parents are, in every sense, teachers; and their task, though different from that of a classroom teacher, is vital. A good relationship between the two kinds of teachers is most helpful to the child. Activities related to this goal include classroom observations, classroom participation, and field trips.

PATTERNS OF USE

Unit packets are sequential and cumulative, providing a complete program. The activities may also be used independently.

ASSESSMENT PROVISIONS

There is no formal testing. The home activities that the parent does with the child reinforce what the child has learned at school.

TIME REQUIREMENTS

Each home activity in the parent manual requires approximately 10-15 minutes to complete. Of course, parents are free to spend the amount of time they feel is necessary for each activity. The home activities continue throughout the school year. Likewise, the parent advisory committee meets once a month throughout the year.

IMPLEMENTATION PROCEDURES

Strategies for implementation of the parent involvement product include:

1. Home visits made by the teacher or the parent involvement agent.
2. Orientation meetings for parents conducted at the school.
3. Organizing parent advisory committee.
4. Involvement of parents in classroom observation.
5. Involvement of parents as participants in classroom activities.
6. Involvement of parents in field trip activities.
7. Conducting an orientation to the parent education element.
8. Giving demonstration sessions for home activities.

ASSURANCES AND CLAIMS

There have been no reports of harm or damage to children or families caused by the use of these materials. The materials have been used only in conjunction with the *Bilingual Early Childhood Program, Level III*, but examination of the activities suggests that they are applicable to a variety of settings. The materials are designed for use with Spanish-speaking families, and no data are available either to support or discourage their use with English-speaking families. The materials do not appear to promote any social, sexual, or racial biases, and no complaints of this nature have been received. The printed materials use the generic "he."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Home Activities for Parents	1 per family	6.00	Consumable yearly	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

This product carries a 1974 copyright by Southwest Educational Development Laboratory and becomes public domain in 1979. It is currently available from the publisher/distributor:

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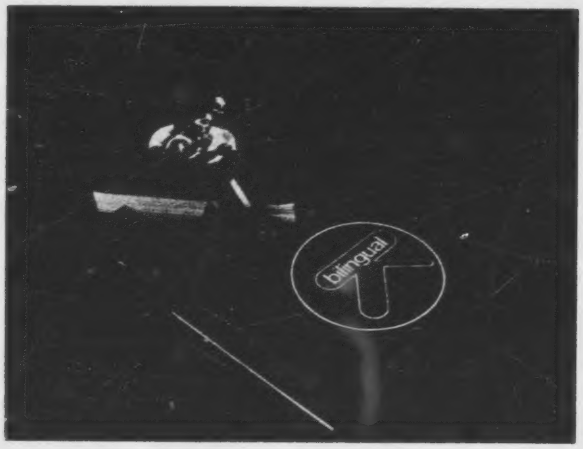

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL KINDERGARTEN STAFF DEVELOPMENT

An extensive multimedia product designed for preservice and inservice training

Bilingual Kindergarten Staff Development, an extensive multimedia staff development product of the bilingual kindergarten system, designed for preservice and inservice training, is divided into two parts—the site training package and the teacher materials.

The site training package materials are designed to be used by the district supervisor, or by an experienced teacher, to train groups of teachers new to the product. Twelve filmstrips, with accompanying cassette recordings and script booklets, demonstrate classroom procedures and deal with such topics as classroom organization, lesson preparation, testing children, and parent involvement. Teacher materials are illustrated manuals (one set per teacher) which have been developed to assist the teacher both before instruction begins and during the course of the school year. The sections of the three-volume preservice manual are for use with the site training package materials. The two-volume inservice manual helps the teacher use program materials to the greatest advantage. Also included is a manual dealing with parent involvement.

The supervisor's manual (only in the site materials) includes specific instructions for using the product to train teachers in a 5-day preservice workshop. The training model is performance based, featuring frequent simulation and role play of basic teaching skills by the teachers.

The preservice workshop specifically addresses the concerns and training needs of teachers new to the program. Staff development materials dealing with matters of less immediate concern are withheld until the teachers master the basic program model. At this point, their interests and concerns will have shifted toward the less basic content treated in materials designed for later inservice training. The training materials are in transportable, self-contained packages. They are presented in a way that should be easily understood by the teachers so they can use the materials on their own. Every supervising teacher and assistant teacher should have a set of staff development materials. The staff development materials attempt to answer everyday questions asked by teachers. For example, the teacher's manual: (1) Explains the rationale of the bilingual kindergarten system; (2) describes teacher preparation before class (e.g., setting up the classroom, obtaining essential equipment); (3) discusses how to save time, minimize confusion, develop a constructive classroom atmosphere, and help children learn to work independently; (4) shows how to prepare schedules; and (5) presents ideas for designing related activities and enrichment experiences.

Other staff development materials cover such topics as: (1) Obtaining, preparing, and demonstrating the use of learning materials; (2) diagnosing learning difficulties and developing methods to overcome them; (3) administering tests; (4) teaching through modeling; (5) communicating appropriate attitudes and expectations; and (6) equipping and decorating the classroom.

SUBJECT AREA(S)

Staff development materials include several hours of demonstration filmstrips on classroom and lesson preparation, lesson presentation, and testing, plus the following manuals and booklets:

1. Administrator's handbook: Overview of the program and other information for superintendents, principals, and other school administrators.
2. Supervisor's manual: Information for program supervisors about installing the product for the first time.
3. Preservice manual—Volume 1: Details about the product and about how the curriculum elements fit together, general program information, teacher roles and responsibilities.
4. Preservice manual—Volume 2: Detailed information about small-group instruction in sample lessons with critiques and suggestions for improvement, how to prepare and administer unit and mastery tests, how to use test information to plan remedial teaching, how to organize the classroom and plan activities so that control and discipline problems are minimized.
5. Preservice manual—Volume 3: How to set up and equip the various learning centers in the kindergarten classroom.

6. Inservice manual—Volume 1: Practical suggestions for setting up effective learning situations and for responding to children in various situations; how teacher attitudes and expectations can influence success and failure in the classroom; how to teach through example and modeling, in addition to more formal instruction; what to do when a child does not meet the objective of a lesson.

7. Inservice manual—Volume 2: How to demonstrate the uses of manipulative equipment to the children, how to help the children learn to use the equipment independently.

INTENDED USERS AND BENEFICIARIES

Administrators, supervisors, teachers, and assistant teachers of Spanish-speaking 5-year-olds are the intended users.

GOAL(S) OR PURPOSE(S)

Preservice training goals are: (1) To train the teacher in setting up a preschool classroom for maximum program effectiveness; (2) to instruct the teacher in methods of demonstrating and teaching with classroom materials and equipment; (3) to develop teacher skills in classroom assessment of children's learning; (4) to demonstrate and simulate ways of instructing young children; and (5) to assist the teacher in planning, scheduling, and managing classroom activities.

Inservice training goals are: (1) To instruct the teacher in ways of identifying and assisting children who demonstrate problems in learning, (2) to develop the teacher awareness of the ways children learn from modeled behavior, (3) to develop teacher awareness of the effect of negative and positive expectations on the behavior of children, and (4) to further develop the teacher's ability to maximize the learning which can occur through the use of classroom materials.

PATTERNS OF USE

Staff development is presented to the school personnel in two forms, as preservice training and as inservice training.

The preservice training model has been developed for use in a 1-week (5-day) workshop intended to help new teachers make a smooth start. The workshop is designed on the assumption that the teachers have little or no prior knowledge or experience in the program. Emphasis is placed on the instructional model, rationale, and practice in teaching and classroom organization techniques.

The 5-day workshop is an absolute minimum training requirement. It is used as a model only because 5 days is the maximum time available for preservice training in many school districts.

The model workshop for new teachers has been planned with several criteria in mind. First, the workshop stresses the knowledge and skills required for preparing the classroom and getting the school year off to a good start. Knowledge and skills which will be important later have been left for treatment during future inservice training.

The differing concerns of teachers with different levels of experience with the product have also been taken into account. Teachers just beginning to use the product are primarily concerned about what they have to do and how they should do it. Once they have mastered the basic instructional model and the necessary teaching techniques, they become more concerned about the rationales underlying the techniques and about how to adapt the basic model to meet the needs of individual children. Therefore, the preservice workshop concentrates primarily on presenting the basic model and on providing practice with the basic techniques, leaving analysis and discussion of rationales and adaptation problems for later inservice meetings and workshops.

The preservice workshop is ordinarily conducted by the supervisor, although others may also be involved. The term "trainer" is used to refer to the supervisor or anyone else who has responsibility for planning and leading one or more workshop sessions.

Two or three hours per week for inservice training is strongly recommended, especially for new teachers. In addition, teachers and assistant teachers should have a minimum of 45 minutes per day together to plan their activities for the following day.

It is also recommended that staff development supervisors spend approximately 1-1/2 to 3 hours each day observing in classrooms at the beginning of the year.

ASSESSMENT PROVISIONS

There is no formal testing. Teacher evaluation is an ongoing part of the supervisor's activities with observational checklists provided.

The preservice training model workshop is heavily performance based in its methods and objectives. Participants are expected not merely to read about and discuss their roles in the program, but also to show that they understand and can perform the behaviors associated with those roles. They practice teaching lessons, giving equipment demonstrations, making out schedules, planning related activities, making smooth transitions, and setting up their classrooms.

TIME REQUIREMENTS

The preservice workshop requires a minimum of 5 days, 6 hours per day. Inservice training is an ongoing activity consisting of 2 to 3 hours of training per week throughout the school year. In addition, the teacher-assistant teacher team should have a minimum of 45 minutes each day to plan for the following day.

The supervisor will visit the classrooms approximately 1-1/2 to 3 hours per week to observe.

IMPLEMENTATION PROCEDURES

The requirements for effective presentation and use of the staff development product are as follows:

1. During the first year of the program, it is strongly recommended that 1 full-time supervisor be assigned for

each 10 classrooms to assist with regular and continuous staff development.

2. The local supervisor will participate in a 7- to 10-day preservice workshop for supervisors, designed specifically to train them to install the program and to conduct preservice and inservice teacher training.

3. A 5-day preservice workshop for teachers will be held at each site before instructional activities begin.

4. Staff development supervisors should spend approximately 1-1/2 to 3 hours each day observing in classrooms.

5. Teachers should be given 2 or 3 hours per week for inservice training. In addition, teachers and assistant teachers should have a minimum of 45 minutes per day to plan their activities for the following day. This planning must be scheduled so that each teaching team can plan together.

The laboratory strongly recommends that an orientation be held for all staff members teaching in the local school. Experience has shown that total staff involvement contributes greatly to a successful program and minimizes misunderstandings and difficulties.

The National Educational Laboratories Publishers, Inc., (NELP) provides preservice training to all districts that purchase the program directly from the publisher. The training workshop usually lasts 4 days and is given during the summer. NELP offers this once-a-year training free of charge with the individual districts paying only travel expenses for their participants.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

The product has been used in more than 150 sites where bilingual kindergarten training has been conducted. No reports of harm or damage to teachers or children resulting from the use of staff development activities were reported.

Assurances of Transportability

Materials have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the approval process, the materials were made available for critical review by both professional and special interest groups. Testimony, solicited by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural group.

Claims of Social Fairness

All materials in the bilingual kindergarten system, including the staff development materials, were designed to be relevant to the cultural, social, and linguistic experiences of Spanish speakers. It is recognized, however, that teachers may or may not share these experiences, and the teacher materials do not assume a particular background or heritage. The generic "she" is used to refer to the teacher and the supervisor, and "he" is used to refer to the child.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher staff development manuals	1 per teacher	24.00	Reusable	
Site staff development manuals, tapes and filmstrips	1 per site	81.00	Reusable	

DEVELOPER/AUTHOR:

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Austin, Tex. 78701

Shari Nedler, Program Director
Joyce Evans, Program Coordinator

AVAILABILITY

The product was copyrighted in 1973 by Southwest Educational Development Laboratory and becomes public domain in September 1978. Product materials are available from:

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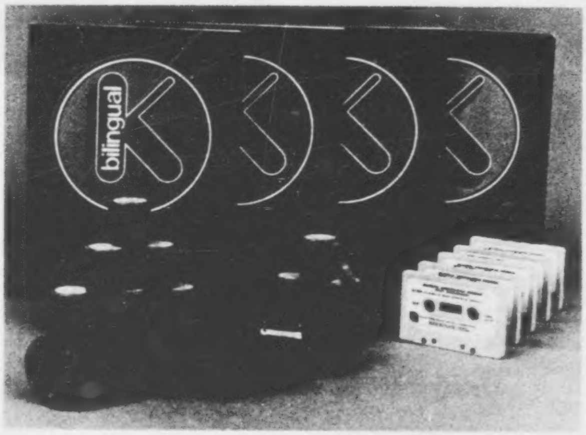

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 025

VIVIENDO Y APRENDIENDO EN *EL HOGAR*

A multimedia training package for Spanish-speaking, low-income parents of preschool children

Viviendo y Aprendiendo en el Hogar is a multimedia training package for Spanish-speaking, low-income parents of preschool children. Designed for a leader, an observer, and 15 parents, the package requires 5 sessions of approximately 1-1/2 hours.

The package includes: (1) A leader's manual; (2) detailed session procedures; and (3) a variety of media products—video tapes, filmstrips, films, transparencies, and take-home pamphlets. All aural materials are in Spanish. Printed materials are in Spanish and English. Each session procedure is designed with an introduction, a straightforward presentation of concepts, group participation activities, and a summary.

The leader's manual includes specific instructions on techniques of group leadership, directions for increasing participation through a variety of techniques such as role playing, simulation, and group discussion, as well as an overview of the training sessions.

The sessions show parents how they can teach their children throughout the day by talking about home activities and household objects and how they can encourage their children to search for answers and solutions independently. The sessions show parents how to use home activities and household objects to enrich their children's learning without purchasing commercial materials.

Each session procedure includes detailed information on how to present the particular concepts included. Following a statement of the purpose and focus of the session, the format is as follows: Introduction, review (if appropriate), overview of media presentation, presentation, discussion, group participation activities, summary, and evaluation. Sample dialog is included when appropriate.

Media include two video tapes or films, filmstrips and audiotapes, a set of transparencies, game cards, pictures, and pamphlets for participants.

Although materials and program ideas for use in parenting programs are available, they are generally scattered, unvalidated, and unreplicated. Further, evidence suggests that supportive behavior by a valued person, such as a mother, is highly correlated with cognitive development; but no systematic attempt is being made to build upon this evidence, and little attempt is being made to use modern technology for wide application of successful strategies. These lacks and needs in combination present one overriding problem: Adults involved in performing services for children need more knowledge and skill in child care.

Materials currently available for use with parents tend to be heavily oriented toward middle-class parents and heavily dependent upon the printed word. Few, if any, are organized in modular form so that they can be presented independently, are presented in multimedia format so that an adult learner can succeed with only minimal reading skills, or are presented in Spanish so that native Spanish speakers can use them with ease.

Viviendo y Aprendiendo en el Hogar is a multimedia approach developed in response to the assessed need for information on basic parenting skills, with minimal reliance upon printed materials and/or direct lecture. The topic was selected by two advisory groups as important for low-income parents of preschool children. One was comprised of professionals in the field of early childhood education, and the other was composed of low-income parents and teachers of various ethnic groups. A survey of parents was also utilized.

The instructional principles followed are to develop awareness, knowledge, or comprehension, and then to apply them. A variety of teaching strategies are described in the leader's manual and are also built into each session procedure. Strategies include large- and small-group discussions, simulation activities, role play, problem-solving situations, games, and evaluation, as well as direct presentation of information.

SUBJECT AREA(S)

The module includes the following subject areas: Parental attitudes, behaviors, and feelings, and their effects on children; using home activities to help children learn; materials to use with children at home; and how to structure a learning experience for a child at home.

INTENDED USERS AND BENEFICIARIES

The intended users of the module are Spanish-speaking low-income parents of preschool children.

GOAL(S) OR PURPOSE(S)

The participants will: (1) Recognize that their attitudes, behavior, and feelings affect their child; (2) understand the value of home activities in helping children learn; and (3) be able to use home materials and activities with their children.

PATTERNS OF USE

Sessions are sequential and cumulative.

ASSESSMENT PROVISIONS

Tests of participant knowledge of module content are provided for use at the beginning of the study and following completion of the package. In addition, criterion-referenced tests of content of each session are provided.

TIME REQUIREMENTS

The package consists of five sessions, each requiring a period of approximately 1 hour 30 minutes.

IMPLEMENTATION PROCEDURES

Audiovisual equipment is required.

No specific previous training is required, but a 1-day training session for leaders is recommended.

ASSURANCES AND CLAIMS

Assurances

No reports of harm—physical, psychological, sociological, or other—have been received at this time as a consequence of any activity of the product. Additional data will be collected during pilot and field testing.

No complaints of ethnic or sex-role bias have been received at this time. Additional data will be collected during pilot and field testing.

Claims

The Southwest Educational Development Laboratory follows a systematic process for the development of educational products. This product development incorporates the entire gamut of activities in the formulation, development, testing, and evaluation of an educational product so that quality is assured.

Products are cycled through design test, after which materials are revised on the basis of feedback from the target population, leaders, and observers; then through pilot test, and revised on the basis of feedback; and finally through field test, after which a final revision based on field data is made.

The multimedia training package for Spanish-speaking parents, *Viviendo y Aprendiendo en el Hogar*, is being cycled through the laboratory's developmental process, and field revisions will be complete by November 30, 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Leader's manual	1 per package	Not available	Reusable	
Content outline	1 per package	Not available	Reusable	
Session procedures (includes filmstrips, films, slides, transparencies, audiotape, brochures, role-playing cards and game cards)	1 per package	Not available	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Joyce Evans, Acting Program Director
Joyce Coleman, Component Coordinator

AVAILABILITY

The product exists in prepublication form only; no copies are available for distribution at this time.

Development of two additional modules began in spring 1975, with a projected completion date of December 1975.

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), GRADE 1

A comprehensive program including English and Spanish components

The *Bilingual Oral Language and Reading* (BOLAR) system is a comprehensive bilingual-bicultural program composed of two carefully sequenced and interrelated components: (1) English Oral Language and Reading and (2) Spanish Oral Language and Reading. Appropriate progression through the curriculum allows children of either language dominance to develop oral, reading, and writing skills in both Spanish and English.

The program employs an eclectic approach which includes: (1) A heavy stress on language experience as a basic, motivational tool for teaching reading; (2) a modified version of the audiolingual approach to second-language instruction; (3) the sight-word approach to English reading with a gradual introduction of phonics; (4) the phonic, sound-to-symbol, approach to Spanish reading; and (5) careful component sequencing and cross-component correlation to promote children's success and elevated self-concept.

In the Spanish oral-language strand of the program, basic conversational Spanish language patterns are taught through a series of small-group activities. Lessons are presented as diverse situations created to exemplify specific language elements. The teacher encourages children to participate first through dramatization in the form of dialogs with puppets and then through dialogs among themselves. This nonthreatening setting enables students to gain both the self-confidence and the language proficiency to begin to read and write in Spanish.

Spanish reading is introduced through the language experience approach, which establishes the awareness that reading is just "talk written down" and provides motivation to read by giving children opportunities to see their own "talk written down." The basis for phonic sound-to-symbol, instruction lies in: (1) Comprehensive skills workbooks which provide exercises in visual/auditory discrimination and other prereading skills, (2) exercises introducing and reinforcing Spanish vowel and consonant sounds and symbols, (3) selections to read for comprehension, (4) syllabication exercises, and (5) reinforcement and enrichment activities. A series of independent readers allows children to apply their skills to interesting reading materials and provides incentive for further reading.

In the English oral-language strand, basic conversational English language patterns are taught through a series of small-group activities. Children learn to talk about home, family, neighborhood, school, and other familiar topics in a nonthreatening setting, thereby gaining both the self-confidence and the language proficiency to begin to read and write English. Special attention is paid to phonology through classroom exercises accompanied by visuals, which make use of the "minimal pair" approach to contrasting linguistic elements.

The English reading strand is composed of three interrelated sequences. The language experience approach establishes the awareness that reading is just "talk written down" and provides motivation to read by giving students opportunities to see their own "talk written down." The sight-word approach teaches children fundamental vocabulary and function words, in addition to important comprehension skills. The third sequence, which includes visual/auditory discrimination and introductory phonics, correlates with the language experience and sight-word sequences; children receive additional decoding skills as they move toward independent, self-motivated reading. Two staff development manuals present both theoretical background and implementation guidelines.

SUBJECT AREA(S)

Both the English and Spanish oral-language strands teach basic conversational language patterns to second-language learners as preparation for reading and writing. Both reading strands use language experience sharing to introduce reading to both 1st- and 2d-language learners; this approach is based on children's own interests and is highly motivational. To minimize linguistic interference, the sight-word approach is used in the English reading strand with gradual introduction of phonics. The Spanish reading strand uses the phonic approach exclusively because of the close correlation between the Spanish letters and their sounds. Independent reading of interesting printed materials with minimal teacher intervention is an important element of both strands.

INTENDED USERS AND BENEFICIARIES

BOLAR, grade 1 instructional materials not only meet the needs of Spanish-speaking 1st graders in mixed or homogeneous settings, but also may be presented in the bilingual, ESL (English as a second language), SSL (Spanish as a second language) modes, or any combination of these modes suited to local circumstances and administrative conditions.

GOAL(S) OR PURPOSE(S)

To introduce children to Spanish and English oral language and reading through a meaningful combination of approaches: (1) Language experience sharing in both languages; (2) a modified audiolingual approach to second-language learning; (3) the sight-word approach to English reading with a gradual introduction to phonics; and (5) the phonic, sound-to-symbol, approach to Spanish reading.

PATTERNS OF USE

The components and the strands within them are sequential and cumulative. The strands are taught alternately and/or concurrently.

ASSESSMENT PROVISIONS

The teacher assesses language experience, oral language, and sight-word progress through informal measures suggested in the teacher's manuals; student workbooks include systematic evaluations. The teacher also administers criterion-referenced tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may be used also as diagnostic instruments to determine initial placement.

TIME REQUIREMENTS

The program is designed to be used for 2 hours a day for 1 year. In terms of daily scheduling, the amount of time spent on each strand's small-group instruction depends upon several factors: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The program requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and teacher's manuals accompanying the student curriculum materials.

Personnel Required for Product Adoption and Implementation

Because of the program's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. The ideal situation is that both of these individuals be bilingual, but at least one of them should be. In cases of classrooms with no bilingual instructor, an arrangement may be worked out in which a bilingual teacher "rotates" or exchanges certain responsibilities with a monolingual English-speaking teacher.

Teachers must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher's manuals accompanying the curriculum materials.

ASSURANCES AND CLAIMS

Assurances

Formative and summative data obtained during a 6-year development and installation process have yielded no substantial expressed concern by pilot and field sites or dissemination sites regarding possible physical, psychological, or sociological harm resulting from the curriculum use. The materials were developed and installed by multiethnic staff, consultants, and practitioners in the field.

Social and cultural fairness have been a major concern of the multiethnic staff from the beginning of the development of the materials. A stringent test of cultural fairness of the completed system was the textbook review process of the State of Texas. The curriculum system passed this process and was adopted as approved materials for the State of Texas.

Assurance of replicability and transportability rests on a widespread installation of the curriculum system in numerous school systems in several States.

Claims

Target pupils for the BOLAR, grade 1 instructional materials demonstrated significant performance gains in both Spanish and English language comprehension, as measured by the tests of basic experience-language (Spanish and English versions). In comparison to similar children with more traditional language instruction, the target pupils demonstrated comparable gains in English and significantly greater Spanish language gains. The latter data, resulting from a tightly controlled covariance design, indicate that pupils taught with the BOLAR materials may be expected to maintain a "normal" rate of English language acquisition while experiencing the benefit of instruction and skills development in the Spanish language. Data from criterion-referenced mastery tests, designed for postinstructional determination of concepts acquisition, reveal that an average of more than 75 percent of the target pupils exhibited desired concept mastery outcomes. Higher performance levels were evidenced for Spanish and oral language instructional objectives. In response to the pupil attitude inventory, a measure of pupil affect toward the four BOLAR instructional components, an average of more than 80 percent of the field test pupils indicated positive attitudes toward their learning experience. Pupil reaction was more favorable toward the English and oral language classroom activities. Of the classroom teachers and aides responding to the user questionnaire, 89 percent expressed a desire to use the BOLAR materials the following school year.

The BOLAR, grade 1 instructional system is a product of the Southwest Educational Development Laboratory's multistage development process, in which educational products and practices are revised and refined to their final form based on extensive "in-the-classroom" testing and practitioner feedback. Data on which product claims are based were obtained during field test of the materials with predominately native Spanish-speaking children of migratory agricultural workers in south Texas. The field-test evaluation and teacher training were conducted by persons independent of the program development staff. Some structural refinements to the program have been made since field testing was completed in 1973. For example, the four program components–*Spanish Oral Language, English Oral Language, Spanish Reading, and English Reading*–were separated into discrete packages rather than remaining a single package, and the number of mastery tests was reduced from 11 to 8. The educational content of the materials was not appreciably altered, making it unlikely that the recent product changes, made primarily for marketing purposes, would alter the evaluative evidence to a significant extent.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set including student workbooks, teacher's manuals, flashcards, spirit masters, student readers, and criterion tests	1 set per 30 students	624.02	Teacher's manuals reusable; workbooks consumable yearly	
Lectura y Escritura, Libro 1, cuaderno	1 set per 30 students	3.75	Consumable yearly	
Lectura y Escritura, Libro 2, cuaderno	1 set per 30 students	3.95	Consumable yearly	
Lector 1, *Mi Mamá y Mi Papá*	1 set of 15 per 30 students	.36	Reusable	
Lector 2, *Juguetes y Juegos*	1 set of 15 per 30 students	.50	Reusable	
Lector 3, *Lo Mío*	1 set of 15 per 30 students	.60	Reusable	
Lector 4, *Mi Familia*	1 set of 15 per 30 students	.65	Reusable	
Lector 5, *Nuestras Fiestas*	1 set of 15 per 30 students	.70	Reusable	
Basic Reading Skills, Book 1, workbook	1 set per 30 students	1.74	Consumable yearly	
Basic Reading Skills, Book 2, workbook	1 set per 30 students	3.75	Consumable yearly	
Reader 1, *Who Are You?*	1 set of 15 per 30 students	.32	Reusable	
Reader 2, *Jump and Play*	1 set of 15 per 30 students	.50	Reusable	
Reader 3, *I Can Ride*	1 set of 15 per 30 students	.55	Reusable	
Reader 4, *Big and Little*	1 set of 15 per 30 students	.55	Reusable	
Reader 5, *Play with Me*	1 set of 15 per 30 students	.55	Reusable	
Reader 6, *Two Plus Two*	1 set of 15 per 30 students	.55	Reusable	

DEVELOPER/AUTHOR:

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AVAILABILITY

The *Bilingual Oral Language and Reading System* was copyrighted in 1972 with developmental copyright protection until 1977. It is currently available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH ORAL LANGUAGE, GRADE 1

A program which employs a modified version of the audiolingual approach to English-as-a-second-language instruction

Basic language patterns and vocabulary are based upon: (1) The findings of several research studies conducted to analyze the language patterns of Spanish-speaking kindergarten and 1st-grade children; (2) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania); and (3) a systematic comparative analysis of English and Spanish phonology, syntax, lexicon, and semantics.

The component employs a modified version of the audiolingual approach to English-as-a-second-language instruction, complemented by situational reinforcement and activities which encourage creative self-expression; the lesson objectives do not require set responses. Special attention is paid to phonology; this is specifically addressed in a supplemental publication, *English Pronunciation, Book 1*. Oral classroom exercises, accompanied by visuals, make use of the "minimal pair" approach to contrasting linguistic elements.

Two basic teacher's manuals, *Oral Language, Book 1*, and *Oral Language, Book 2*, contain lessons focusing on elementary environmental information such as names and addresses, articles of clothing, colors, location of objects, and actions in progress. Children acquire adequate language to use English effectively in everyday situations; the activity topics serve as a framework for teaching this functional language.

The teacher involves small groups of children in language activities, each of which is designed to teach specific language patterns. Drill exercises and repetition are used only until the basic structures are established; then students participate in more informal, though related, practice activities such as dialogs, games, poems, stories, songs, and rhymes.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all BOLAR components.)

SUBJECT AREA(S)

Basic conversational English language patterns are taught through a series of small-group activities. Children learn to talk about home, family, neighborhood, school, and other familiar topics in a nonthreatening setting, thereby gaining both the self-confidence and the language proficiency to begin to read and write English effectively and with understanding.

INTENDED USERS AND BENEFICIARIES

The component is designed primarily for native Spanish-speaking students who enter 1st grade with minimal English language proficiency. However, the activities can be adapted for use with kindergarten level children, as well as 2d- or 3d-graders for whom basic English instruction would be beneficial.

GOAL(S) OR PURPOSE(S)

The four basic goals of the *English Oral Language* component are to enable children: (1) To master basic English structures through a variety of drills and informal activities, (2) to use basic English structures in a variety of situations, (3) to develop oral language competence in English in order to be prepared for reading and writing, and (4) to master the English sounds which are not part of the home language.

PATTERNS OF USE

The lessons, and the activities within them, are sequential and cumulative.

ASSESSMENT PROVISIONS

The teacher assesses student progress by using the integration activities (evaluations) included at certain points in the teacher's manuals; these may be used as postinstructional assessments or for diagnostic instruments to determine initial placement. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. One mastery test accompanies each of the teacher's manuals.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes each day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher's manuals accompanying the student curriculum materials.

Because of the component's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. These individuals must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher's manuals carefully to become familiar with the language teaching strategies inherent in the component.

Teaching the component does not require bilingual ability. However, in classrooms including native Spanish-speaking children, at least one of the instructional personnel should have some Spanish proficiency to be able to understand the children and make simple explanations. When the component is used in conjunction with corresponding Spanish components, a bilingual instructor is necessary.

ASSURANCES AND CLAIMS

The *English Oral Language Component* of the *BOLOR System for Grade 1* (including portions of earlier versions, designated as Language Development and Reading, and adaptations of the materials by the SEDL Follow Through Program) has been used and tested in more than 90 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

BOLAR instructional materials—including the *English Oral Language Component*—have been approved for statewide textbook adoption beginning in September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special-interest groups. Testimony, solicited from these groups by the State Textbook Committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other persons who are familiar with the program's instructional methodology Since completion of field testing in 1973, over 200 complete BOLAR curriculum packages have been purchased for classroom use. Over 50 others are using components of the BOLAR system. As the BOLAR materials represent the only grade-1 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Oral Language, Book 1, teacher's manual	1 per instructor	7.25	Reusable	
Oral Language, Book 2, teacher's manual	1 per instructor	5.00	Reusable	
English Pronunciation, Book 1, teacher's manual	1 per instructor	5.50	Reusable	
English Pronunciation, Book 1, flashcards	1 set per instructor	7.00	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

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AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 028

SPANISH ORAL LANGUAGE, GRADE 1 (PART OF BILINGUAL ORAL LANGUAGE AND READING PROGRAM)

A program which employs a situational approach in which Spanish is used as a means for conveying ideas and information in meaningful contexts

Two teacher manuals, *Expresión Oral, Libro 1*, and *Expresión Oral, Libro 2*, contain lessons based on the most basic patterns of Spanish: The elements with which native speakers of Spanish form and produce sentences. The program is sequenced from easy to difficult and from concrete to abstract. The lessons are designed to present diverse situations created to exemplify syntactical structures, patterns of intonation, and vocabulary that children should learn. Pronunciation is stressed in early lessons in order to take advantage of children's ability and willingness to mimic and reproduce sounds. Vocabulary items are introduced only within the sentence structures being taught; they are not singled out and taught separately, i.e., students learn only enough vocabulary to manipulate the structures.

The component employs a situational approach, in which Spanish is used as a means for conveying ideas and information in meaningful contexts. At all times, students must know and understand the meaning of the language being used; language must always be correlated with behavior. Puppets play an important role, especially in the introduction and demonstration of new structures. Lesson development follows these basic steps: (1) Observation of a dialogue between the teacher and the puppets; (2) limited participation in the dialogue by the children through dramatization; and (3) full participation, as the children conduct the dialogue among themselves.

Basic language patterns and vocabulary are based upon: (1) The findings of several research studies conducted to analyze the language patterns of Spanish-speaking kindergarten and 1st-grade children; (2) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania); and (3) systematic comparative analysis of English and Spanish phonology, syntax, lexicon, and semantics.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all *Bilingual Oral Language and Reading* (BOLAR) components.)

SUBJECT AREA(S)

Basic conversational Spanish language patterns are taught through a series of small-group activities. Lessons are presented as diverse situations created to exemplify specific language elements. The teacher encourages children to participate first through dramatization in the form of dialogs with puppets and then through dialogs among themselves. This nonthreatening setting enables students to gain both the self-confidence and the language proficiency to begin to read and write in Spanish.

INTENDED USERS AND BENEFICIARIES

The component is intended for children whose native language is English or children who have little knowledge of Spanish.

GOAL(S) OR PURPOSE(S)

The four basic goals of the *Spanish Oral Language Component* are to enable students: (1) To develop the ability to understand and reproduce Spanish language structures; (2) to develop the ability to understand and use basic Spanish language structures in communicative situations; (3) to develop understanding and appreciation of the culture, the customs, and the traditions of the Spanish-speaking population of the United States; and (4) to develop oral language competence in Spanish in order to be prepared for reading and writing.

PATTERNS OF USE

The lessons are sequential and cumulative.

ASSESSMENT PROVISIONS

The teacher assesses student progress by using the informal evaluations at the end of each lesson according to suggestions in the teacher manuals. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes a day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site(s).

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher manuals accompanying the student curriculum materials.

Because of the component's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. The ideal situation is that both of these individuals be bilingual; at least one of them should be. In cases of classrooms with no bilingual instructor, an arrangement may be worked out in which a bilingual teacher "rotates" or exchanges oral language responsibilities with a monolingual English-speaking teacher.

Teachers must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher manuals accompanying each strand of the product.

ASSURANCES AND CLAIMS

The *Spanish Oral Language Component* of the BOLAR system for Grade 1 (including portions of earlier versions, designated as language development and reading, and adaptations of the materials by the SEDL Follow Through Program) has been used and tested in more than 50 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

BOLAR instructional materials—including the Spanish oral language component—have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special interest groups. Testimony, solicited from these groups by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are [illegible] experienced in Spanish-English instruction. [illegible] [illegible]ning may be provided by SEDL or by other bi[illegible]ucators who are familiar with the program's instruc[illegible] methodology. Since completion of field testing in 1973, over 200 complete BOLAR curriculum packages have been purchased for classroom use. Over 50 others are using components of the BOLAR system. As the BOLAR materials represent the only grade 1 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Expresión Oral, Libro 1, manual	1 per instructor	5.25	Reusable	
Expresión Oral, Libro 2, manual	1 per instructor	6.12	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

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AVAILABILITY

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Austin, Tex. 78767

Expresión Oral
2

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH READING, GRADE 1

A program which makes use of the most relevant features of language experience: Sight reading and phonics

The 1st-grade English reading program employs an eclectic approach which evolved as the result of: (1) Extensive research studies of the language patterns of bilingual children; (2) systematic comparative analysis of the phonology, syntax, lexicon, and semantics of both Spanish and English and indepth analysis of decoding skills in both languages from which evolved materials which minimize language interference and maximize positive language transfer in the reading process; and (3) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania).

The component makes use of the most relevant features of language experience, sight reading, and phonics. Reading is first introduced through a systematic program of language experience sharing in which children's spoken language is recorded and "read." This initial and ongoing teaching strategy is based on the premise that students will want to read about things that are of interest to them. A teacher manual, *The Language Experience Approach to Reading*, contains information and guidelines for conducting language experience sessions.

Students then participate in small-group, sight-word reading activities in which familiar spoken patterns are presented in a series of pocket chart stories. The sight-word approach is used in order to maximize the learning of whole communications as well as to minimize any possible interference caused by the differing sound-to-symbol relationships of Spanish and English. The seven sight-word strategies first focus upon reading entire stories and sentences and then isolated words. Modeling, substituting, matching, and framing are used to teach basic vocabulary and function words; closing, dialoging, and composing are the unique strategies which serve as comprehension checks in lieu of the oral and written questions found in traditional reading programs. The sight-word strand of the component also includes 19 short readers designed for independent reading by children as they master vocabulary and function words. Two teacher's manuals, *Reading English, Book 1*, and *Reading English, Book 2*, delineate detailed procedures for implementing the BOLAR sight-word approach. Flashcards and a complete set of student readers accompany the manuals.

The component includes two student workbooks designed to help children develop and practice visual discrimination, visual memory, sound-to-symbol association of consonants (both initial and final) and final digraphs, letter names, and letter formation. The consonant sounds introduced are those shown by comparative analysis to have the same or very similar sound-to-symbol relationships as the corresponding Spanish consonants, a further step toward minimizing language interference. The skills books are used in conjunction with both the language experience approach and the sight-reading strategies to gradually provide increasingly effective decoding skills. These books, *Basic Reading Skills, Book 1*, and *Basic Reading Skills, Book 2*, are accompanied by teacher's manuals which bear the same titles.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all bilingual oral language and reading (BOLAR) components.)

SUBJECT AREA(S)

Three interrelated strands comprise the 1st-grade English reading component. The language experience approach establishes the awareness that reading is just "talk written down" and provides motivation to read by giving students opportunities to see their own "talk written down." The sight-word approach teaches children fundamental vocabulary and function words, in addition to important comprehension skills. The third strand, which includes visual/auditory discrimination and introductory phonics, is sequenced in correlation with the language experience and sight-word strands; children receive additional decoding skills as they move toward independent, self-motivated reading.

RD 110 029

INTENDED USERS AND BENEFICIARIES

The component is designed primarily for native Spanish-speaking students who enter 1st grade with minimal English language proficiency. It can, however, be used with students of undetermined Spanish/English language dominance or native English speakers. If used as a second language reading program, students should receive prior English oral language instruction.

GOAL(S) OR PURPOSE(S)

To introduce students to reading through a meaningful combination of approaches: Language experience sharing, initially in the dominant language and, subsequently, in the second language; sight-word reading with enough flexibility and variety to allow individual success; and visual/auditory discrimination and elementary phonics to provide important complementary decoding skills.

PATTERNS OF USE

The lessons and activities within each strand are sequential and cumulative; the three strands are taught concurrently and/or alternately.

ASSESSMENT PROVISIONS

The teacher assesses language experience and sight-word progress through informal measures suggested in the teacher manuals; the visual discrimination/visual memory sections include diagnostic pretests and posttests to evaluate individual progress; the phonics workbook includes evaluation as every fifth lesson. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. The component includes two comprehensive mastery tests.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes a day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site(s).

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher manuals accompanying the student curriculum materials.

Because of the component's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. These individuals must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher manuals accompanying each strand of the component.

Teaching the component does not require bilingual ability. However, in classrooms including native Spanish-speaking children, at least one of the instructional personnel should have some Spanish proficiency to be able to understand the children and make simple explanations. When the component is used in conjunction with corresponding Spanish components, a bilingual instructor is, of course, necessary. The program is designed to be self-contained or replicable. However, teacher reaction from demonstration sites indicates that SEDL consultant services are extremely helpful.

ASSURANCES AND CLAIMS

The *English Reading* component of the BOLAR system for grade 1 (including portions of earlier versions, designated as language development and reading, and adaptations of the materials by the SEDL followthrough program) has been used and tested in more than 90 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the BOLAR materials.

BOLAR instructional materials—including the *English Reading* component—have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special interest groups. Testimony, solicited from these groups by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other persons who are familiar with the program's instructional methodology. Since completion of field testing in 1973, over 200 complete BOLAR curriculum packages have been purchased for classroom use. Over 50 others are using components of the BOLAR system. As the BOLAR materials represent the only grade-1 bilingual curriculum for language instruction approved for Texas textbook adoption beginning 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Reading Skills, Book 2, workbook	1 set per 30 students	1.74	Consumable yearly	
Basic Reading Skills, Book 2, workbook	1 set per 30 students	3.75	Consumable yearly	
Reader 1, *Who Are You?*	1 set of 15 per 30 students	.32	Reusable	
Reader 2, *Jump and Play*	1 set of 15 per 30 students	.50	Reusable	
Reader 3, *I Can Ride*	1 set of 15 per 30 students	.55	Reusable	
Reader 4, *Big and Little*	1 set of 15 per 30 students	.55	Reusable	
Reader 5, *Play With Me*	1 set of 15 per 30 students	.55	Reusable	
Reader 6, *Two Plus Two*	1 set of 15 per 30 students	.55	Reusable	
Reader 7, *Look at That*	1 set of 15 per 30 students	.65	Reusable	
Reader 8, *Our Pets*	1 set of 15 per 30 students	.60	Reusable	
Reader 9, *Surprises*	1 set of 15 per 30 students	.70	Reusable	
Reader 10, *Just Ask Tony!*	1 set of 15 per 30 students	.80	Reusable	
Reader 11, *All In a Day!*	1 set of 15 per 30 students	.80	Reusable	
Language Experience Approach to Reading, teacher's manual	1 per instructor	2.25	Reusable	
Basic Reading Skills, Book 1, teacher's manual	1 per instructor	4.00	Reusable	
Basic Reading Skills, Book 2, teacher's manual	1 per instructor	11.00	Reusable	
Reading English, Book 1, teacher's manual	1 per instructor	5.50	Reusable	
Reading English, Book 1, flashcards	1 set per instructor	3.50	Reusable	
Reading English, Book 2, teacher's manual	1 per instructor	6.50	Reusable	
Reading English, Book 2, flashcards	1 set per instructor	10.00	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

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AVAILABILITY

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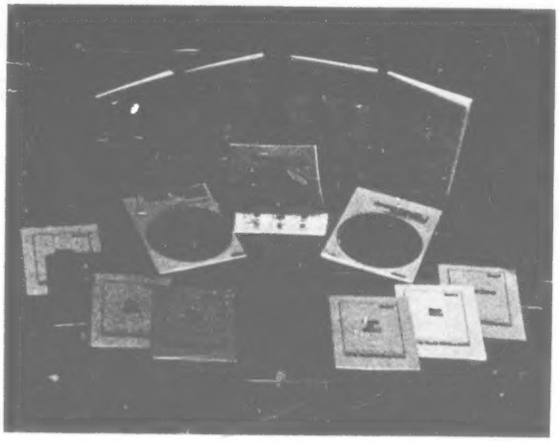

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 030

SPANISH READING, GRADE 1 (PART OF THE BILINGUAL ORAL LANGUAGE AND READING PROGRAM)

A systematic program of language experience based on the premise that children will read about things that are of interest to them

Spanish Reading, Grade 1, employs an eclectic approach which evolved as the result of: (1) Extensive research studies of the language patterns of bilingual children which produced language patterns and vocabulary incorporated into the initial lessons based on the findings of these studies; (2) systematic comparative analysis of the phonology, syntax, lexicon, and semantics of both Spanish and English and indepth analysis of decoding skills in both languages, from which evolved materials which minimize language interference and maximize positive language transfer in the reading process; (3) an analysis of 15 reading programs for the purpose of identifying methodological patterns in the teaching of reading in Spanish-speaking countries; (4) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania); and (5) interviews with bilingual children in Texas, California, and Pennsylvania to determine their interests. The topics in the Spanish readers were selected from a list prepared during these interviews.

Reading is first introduced through a systematic program of language experience sharing in which students' spoken language is recorded and "read." This initial strategy is based on the premise that children will want to read about things that are of interest to them. A teacher's manual, *Lectura a Base de Experiencias*, contains information and guidelines for conducting language experience sessions. Another manual, *Composición Oral y Escrita*, is designed to help children develop the capacity to relate their own experiences to verbal and written expression. This manual contains a series of lessons based on everyday experiences, problem-solving situations, and other topics intended to develop critical thinking and self-expression; it is intended for use throughout the year and ultimately results in original compositions written by students.

Because of the close correlation between the Spanish letters and their sounds, the phonic, sound-to-symbol, approach is used systematically throughout the rest of the Spanish reading program. Two skills workbooks, *Lectura y Escritura, Libro 1,* and *Lectura y Escritura, Libro 2,* include prereading exercises including motor coordination, left-to-right progression, and visual/auditory perception, in addition to instruction in reading and writing of words and sentences containing the five Spanish vowel sounds and symbols and all of the consonants. The skills books also provide practice in reading for comprehension, oral discussion, and syllabication (an important and dependable element in the Spanish language). In addition to the sequence of developmental steps aimed at teaching the basic sound-to-symbol relationships of Spanish, the *Lectura y Escritura* series includes a wide range of enrichment activities which provides reinforcement of word recognition and comprehension skills. Teacher manuals accompanying the student workbooks bear the same titles. A series of five readers complements and reinforces the skills books. These readers are designed and written for children to read independently, after specific cumulative skills buildups, allowing immediate application of learned skills to interesting and appropriate reading materials and providing incentive for further reading.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all bilingual oral language and reading (BOLAR) products.)

SUBJECT AREA(S)

Reading is introduced through the language experience approach, which establishes the awareness that reading is just "talk written down" and provides motivation to read by giving children opportunities to see their own "talk written down." The phonic approach is used throughout the rest of the product. The basis for instruction lies in (1) comprehensive skills workbooks which provide exercises in visual/auditory discrimination and other prereading skills, (2) exercises introducing and reinforcing Spanish vowel and consonant sounds and symbols, (3) selections to read for comprehension, (4) syllabication exercises, and (5) reinforcement activities. A series of independent readers allows children to apply their skills to interesting reading materials and provides incentive for reading further.

INTENDED USERS AND BENEFICIARIES

The product is designed for use with native Spanish-speaking students as their first reading experience or with native English speakers after prior oral language instruction.

GOAL(S) OR PURPOSE(S)

To introduce students to reading the Spanish language by a meaningful combination of approaches: Language experience sharing, through which children become aware of what reading actually is (the spoken word written down), and a sytematic phonic program in which basic decoding skills are acquired and applied in appropriate contexts.

PATTERNS OF USE

The lessons and activities within each strand are sequential and cumulative; the strands are taught concurrently and/or alternately.

ASSESSMENT PROVISIONS

The teacher assesses student progress in language experience and composition through informal measures suggested in the teacher manuals; the skills books include an evaluation page at the end of each lesson. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. One mastery test accompanies each of the student workbooks.

TIME REQUIREMENTS

The product is designed to be used for an average of 30 minutes a day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the product's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site(s).

IMPLEMENTATION PROCEDURES

The product requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher manuals accompanying the student curriculum materials.

Because of the product's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. The ideal situation is that both of these individuals be bilingual; at least one of them should be. In cases of classrooms with no bilingual instructor, an arrangement may be worked out in which a bilingual teacher "rotates" or exchanges reading responsibilities with a monolingual English-speaking teacher.

Teachers must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher manuals accompanying each strand of the product.

ASSURANCES AND CLAIMS

The *Spanish Reading, Grade 1,* product of the bilingual oral language and reading system (including portions of earlier versions, designated as Language Development and Reading, and adaptations of the materials by the SEDL followthrough program) has been used and tested in more than 50 classrooms in 4 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the BOLAR materials.

BOLAR instructional materials—including the Spanish reading product—have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special interest groups. Testimony, solicited from these groups by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups. As a result of some testimony provided during the hearings, the committee requested that the publisher of the BOLAR materials perform several editorial changes to reduce the usage of regional idioms in some of the Spanish reading books.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other bilingual educators who are familiar with the program's instructional methodology. Since completion of field testing in 1973, over 200 complete BOLAR curriculum packages have been purchased for classroom use. Over 50 others are using components of the BOLAR system. As the BOLAR materials represent the only grade 1 bilingual curriculum for language instruction approved for Texas textbook adoption beginning 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Lector 2, *Juguetes y Juegos*	1 set of 15 per 30 students	.50	Reusable	
Lector 3, *Lo Mío*	1 set of 15 per 30 students	.60	Reusable	
Lector 4, *Mi Familia*	1 set of 15 per 30 students	.65	Reusable	
Lector 5, *Nuestras Fiestas*	1 set of 15 per 30 students	.70	Reusable	
Lectura a Base de Experiencias, manual	1 per instructor	2.50	Reusable	
Composición Oral y Escrita, manual	1 per instructor	2.95	Reusable	
Lectura y Escritura, Libro 1, manual	1 per instructor	9.00	Reusable	
Lectura y Escritura, Libro 1, spirit masters	1 set of 47 per instructor	10.00	Reusable	
Lectura y Escritura, Libro 2, manual	1 per instructor	11.00	Reusable	
Lectura y Escritura, Libro 2, spirit masters	1 set of 68 per instructor	14.00	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language and Reading	1 per instructor		Reusable	
Lectura y Escritura, Libro 1, cuaderno	1 set per 30 students	3.75	Consumable yearly	
Lectura y Escritura, Libro 2, cuaderno	1 set per 30 students	3.95	Consumable yearly	
Lector 1, *Mi Mamá y Mi Papá*	1 set of 13 per 30 students	.36	Reusable	

DEVELOPER/AUTHOR:

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AVAILABILITY

The bilingual oral language and reading system and its eight products were copyrighted in 1972 with developmental copyright protection until 1979. It is currently available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), GRADE 2

A comprehensive program composed of two carefully sequenced and interrelated English and Spanish components

The *Bilingual Oral Language and Reading* (BOLAR) system is a comprehensive bilingual-bicultural program composed of two carefully sequenced and interrelated components: (1) English oral language and reading and (2) Spanish oral language and reading. Appropriate progression through the curriculum allows children of either language dominance to develop oral, reading, and writing skills in both Spanish and English.

The program employs an eclectic approach which includes: (1) A heavy stress on language experience as a basic, motivational tool for teaching reading; (2) a modified version of the audiolingual approach to second-language instruction; (3) the sight-word approach to English reading with a gradual introduction of phonics; (4) the phonic, sound-to-symbol, approach to Spanish reading; and (5) careful component sequencing and cross-component correlation to promote children's success and elevated self-concept.

In the Spanish oral language strand of the program, basic conversational Spanish language patterns are taught through a series of small-group activities. Lessons are presented as diverse situations created to exemplify specific language elements. The teacher encourages children to participate first through dramatization in the form of dialogs with puppets and then through dialogs among themselves. This nonthreatening setting enables students to gain both the self-confidence and the language proficiency to begin to read and write in Spanish.

Spanish reading is introduced through the language experience approach, which establishes the awareness that reading is just "talk written down" and provides motivation to read by giving children opportunities to see their own "talk written down." The basis for phonic, sound-to-symbol instruction lies in: (1) Comprehensive skills workbooks which provide exercises in visual/auditory discrimination and other prereading skills, (2) exercises introducing and reinforcing Spanish vowel and consonant sounds and symbols, (3) selections to read for comprehension, (4) syllabication exercises, and (5) reinforcement and enrichment activities. A series of independent readers allows children to apply their skills to interesting reading materials and provides incentive for further reading.

In the English oral-language strand, basic conversational English language patterns are taught through a series of small-group activities. Children learn to talk about home, family, neighborhood, school, and other familiar topics in a nonthreatening setting, thereby gaining both the self-confidence and the language proficiency to begin to read and write English. Special attention is paid to phonology through classroom exercises accompanied by visuals, which make use of the "minimal pair" approach to contrasting linguistic elements.

The English reading strand is composed of three interrelated sequences. The language experience approach follows the pattern of the Spanish reading approach. The sight-word approach teaches children fundamental vocabulary and function words, in addition to important comprehension skills. The third sequence, which includes visual/auditory discrimination and introductory phonics, correlates with the language experience and sight-word sequences; children receive additional decoding skills as they move toward independent, self-motivated reading. Two staff development manuals present both theoretical background and implementation guidelines.

SUBJECT AREA(S)

Both the English and Spanish oral-language strands teach basic conversational language patterns to second-language learners as preparation for reading and writing. Both reading strands use language experience sharing to introduce reading to both 1st- and 2d-language learners; this approach is based on children's own interests and is highly motivational. To minimize linguistic interference, the sight-word approach is used in the English reading strand with gradual introduction of phonics. The Spanish reading strand uses the phonic approach exclusively because of the close correlation between the Spanish letters and their sounds. Independent reading of interesting printed materials with minimal teacher intervention is an important element of both strands.

RD 110 031

INTENDED USERS AND BENEFICIARIES

BOLAR, Grade 2 instructional materials not only meet the needs of Spanish-speaking students in mixed or homogeneous settings, but also may be presented in the bilingual, ESL (English as a second language), SSL (Spanish as a second language) modes, or any combination of these modes suited to local circumstances and administrative conditions.

GOAL(S) OR PURPOSE(S)

To introduce children to Spanish and English oral language and reading through a meaningful combination of approaches: (1) Language experience sharing in both languages; (2) a modified audiolingual approach to second-language learning, (3) the sight-word approach to English reading with a gradual introduction to phonics; and (5) the phonic, sound-to-symbol, approach to Spanish reading.

PATTERNS OF USE

The components and the strands within them are sequential and cumulative. The strands are taught alternately and/or concurrently.

ASSESSMENT PROVISIONS

The teacher assesses language experience, oral language, and sight-word progress through informal measures suggested in the teacher's manuals; student workbooks include systematic evaluations. The teacher also administers criterion-referenced tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement.

TIME REQUIREMENTS

The program is designed to be used for 2 hours each day for 1 year. In terms of daily scheduling, the amount of time spent on each strand's small-group instruction depends upon several factors: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The program requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and teacher's manuals accompanying the student curriculum materials.

Personnel Required for Product Adoption and Implementation

Because of the program's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. The ideal situation is that both of these individuals be bilingual, but at least one of them should be. In cases of classrooms with no bilingual instructor, an arrangement may be worked out in which a bilingual teacher "rotates" or exchanges certain responsibilities with a monolingual English-speaking teacher.

Teachers must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher's manuals accompanying the curriculum materials.

ASSURANCES AND CLAIMS

Assurances

BOLAR, Grade 2 (including earlier versions designated as language development and Reading and adaptations of the materials by the SEDL Follow Through Program) has been used and tested in more than 90 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

BOLAR instructional materials—including Spanish oral language, English oral language, Spanish reading, and English reading—have been approved for statewide textbook adoption beginning in September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special-interest groups. Testimony, solicited from these groups by the State Textbook Committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups. As a result of testimony provided during the hearings, the committee requested that the publisher of the BOLAR materials perform several editorial changes to reduce the usage of regional idioms in some of the pupil Spanish reading books.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A preservice teacher-training session (approximately 3 days) is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other bilingual educators who are familiar with the program's instructional methodology. Since completion of field testing in 1973, over 180 complete BOLAR curriculum packages have been purchased for classroom use. Over 30 others are using components of the BOLAR system. As the BOLAR materials represent the only grade-2 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

Claims

Target pupils for the *BOLAR, Grade 2* instructional materials demonstrated significant performance gains in both Spanish and English reading skills (vocabulary and comprehension), as measured by the Inter-American Spanish reading test and cooperative primary reading test, respectively. In comparison to similar children with more traditional language instruction, the target pupils demonstrated significantly greater reading gains in both languages. The latter data, resulting from a tightly controlled covariance design, indicate that pupils taught with the BOLAR materials may be expected to maintain an accelerated rate of reading skills acquisition in both the Spanish and the English languages. Data from criterion-referenced mastery tests, designed for postinstructional determination of concepts acquisition, reveal that an average of more than 80 percent of the target pupils exhibited desired concept mastery outcomes. Higher performance levels were evidenced for Spanish instructional objectives. In response to the pupil attitude inventory, a measure of pupil affect toward the four BOLAR instructional components, an average of more than 80 percent of the field test pupils indicated positive attitudes toward their learning experience. Pupil reaction was more favorable toward the English and oral language classroom activities. Of the classroom teachers and aides responding to the user questionnaire, 83 percent expressed a desire to use the BOLAR materials the following school year.

The *BOLAR, Grade 2* instructional system is a product of the Southwest Educational Development Laboratory's multistage developmental process, in which educational products and practices are revised and refined to their final form based on extensive "in-the classroom" testing and practitioner feedback. Data on which product claims are based were obtained during field testing of the materials with predominately native Spanish-speaking children of migratory agricultural workers in south Texa[illegible]he field-test evaluation and teacher training were conduc[illegible] by persons independent of the program development staff. Some structural refinements to the program have been made since field testing was completed in 1973. For example, the four program components—Spanish Oral Language, English Oral Language, Spanish Reading, and English Reading—were separated into discrete packages rather than remaining a single package, and the number of mastery tests was reduced from 11 to 7. The educational content of the materials was not appreciably altered, making it unlikely that the recent product changes, made primarily for marketing purposes, would alter the evaluative evidence to a significant extent.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set including student workbooks, teacher's manuals, flashcards, spirit masters, student readers, and criterion tests	1 set per 30 students	733.20	Teacher's manuals reusable; workbooks consumable yearly	

DEVELOPER/AUTHOR:

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Ernest M. Bernal, Jr., Program Director
Ricardo J. Cornejo, Program Coordinator

AVAILABILITY

The *Bilingual Oral Language and Reading System* and its eight components were copyrighted in 1972 with developmental copyright protection until 1977. It is currently available from the publisher/distributor:

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Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 032

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH ORAL LANGUAGE, GRADE 2

A program which employs a modified version of the audiolingual approach to English-as-a-second-language instruction for learners in grade 2

Basic language patterns and vocabulary are based upon: (1) The findings of several research studies conducted to analyze the language patterns of Spanish-speaking kindergarten and 1st-grade children; (2) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania); and (3) a systematic comparative analysis of English and Spanish phonology, syntax, lexicon, and semantics.

The component employs a modified version of the audiolingual approach to English-as-a-second-language instruction, complemented by situational reinforcement and activities which encourage creative self-expression; the lesson objectives do not require set responses. Special attention is paid to phonology; this is specifically addressed in a supplemental publication, *English Pronunciation, Book 2*. Oral classroom exercises, accompanied by visuals, make use of the "minimal pair" approach to contrasting linguistic elements.

Two basic teacher's manuals, *Oral Language, Book 2* and *Oral Language, Book 3*, contain lessons focusing on elementary environmental information and specific content areas. The topics serve as a framework for teaching language; children acquire adequate language to discuss the topics without having to learn new concepts at the same time.

The teacher involves small groups of children in language activities, each of which is designed to teach specific language patterns. Drill exercises and repetition are used only until the basic structures are established; then students participate in more informal, though related, practice activities such as dialogs, games, poems, stories, songs, and rhymes. The lessons in book 4 are guided discussions of various topics which give children further opportunities to use sentence structures already learned in new contexts.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all BOLAR components.)

SUBJECT AREA(S)

Basic conversational English language patterns are taught through a series of small-group activities. Children learn to talk about home, family, neighborhood, school, and other familiar topics in a nonthreatening setting, thereby gaining both the self-confidence and the language proficiency to begin to read and write English effectively and with understanding.

INTENDED USERS AND BENEFICIARIES

The component is designed primarily for native Spanish-speaking students who enter 2d grade with minimal English language proficiency. However, the activities can be adapted for use with other early elementary level learners for whom basic English instruction would be beneficial.

GOAL(S) OR PURPOSE(S)

The four basic goals of the English oral language component are to enable children: (1) To master basic English structures through a variety of drills and informal activities, (2) to use basic English structures in a variety of situations, (3) to develop oral language competence in English in order to be prepared for reading and writing, and (4) to master the English sounds which are not part of the home language.

PATTERNS OF USE

The lessons, and the activities within them, are sequential and cumulative.

ASSESSMENT PROVISIONS

The teacher assesses student progress by using the integration activities (evaluations) included at certain points in the teacher's manuals; these may be used as postinstructional assessments or for diagnostic instruments to determine initial placement. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. One mastery test accompanies each of the teacher manuals, *Oral Language, Book 3*, and *Oral Language, Book 4*.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes each day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher's manuals accompanying the student curriculum materials.

Because of the component's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. These individuals must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher manuals carefully to become familiar with the language teaching strategies inherent in the component.

Teaching the component does not require bilingual ability. However, in classrooms including native Spanish-speaking children, at least one of the instructional personnel should have some Spanish proficiency to be able to understand the children and make simple explanations. When the component is used in conjunction with corresponding Spanish components, a bilingual instructor is necessary.

ASSURANCES AND CLAIMS

The *English Oral Language* component of the *BOLAR System for Grade 2* (including portions of earlier versions, designated as language development and reading, and adaptations of the materials by the SEDL Follow Through Program) has been used and tested in more than 90 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the materials.

BOLAR instructional materials—including the *English Oral Language* component—have been approved for statewide textbook adoption beginning in September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special-interest groups. Testimony, solicited from these groups by the State Textbook Committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other persons who are familiar with the program's instructional methodology. Since completion of field testing in 1973, over 180 complete BOLAR curriculum packages have been purchased for classroom use. Over 30 others are using components of the BOLAR system. As the BOLAR materials represent the only grade-2 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

RD 110 032

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Oral Language, Book 3, teacher's manual	1 per instructor	7.25	Reusable	
Oral Language, Book 4, teacher's manual	1 per instructor	4.25	Reusable	
English Pronunciation, Book 2, teacher's manual	1 per instructor	4.75	Reusable	
English Pronunciation, Book 2, flashcards	1 set per instructor	5.30	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

DEVELOPER/AUTHOR:

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AVAILABILITY

The Bilingual Oral Language and Reading System and its eight components were copyrighted in 1972 with developmental copyright protection until 1979. It is currently available from the publisher/distributor:

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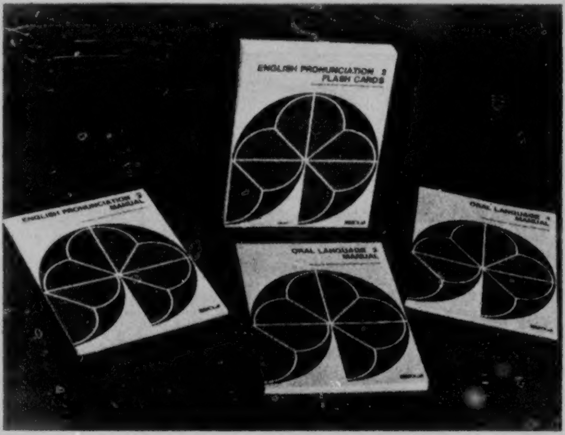

ENGLISH PRONUNCIATION 2 FLASH CARDS
ENGLISH PRONUNCIATION 2 MANUAL
ORAL LANGUAGE 3 MANUAL
ORAL LANGUAGE 4 MANUAL

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 033

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), SPANISH ORAL LANGUAGE, GRADE 2

A program which employs a situational approach in which Spanish is used as a means for conveying ideas in meaningful contexts

The component employs a situational approach in which Spanish is used as a means for conveying ideas and information in meaningful contexts. At all times, the students must know and understand the meaning of the language being used; language must always be correlated with behavior. Puppets play an important role, especially in the introduction and demonstration of new structures. Lesson development follows these basic steps: (1) Observation of a dialog between the teacher and the puppets; (2) limited participation in the dialog by the children through dramatization; and (3) full participation, as the children conduct the dialog among themselves.

The teacher's manual, *Expresión Oral, Libro 3*, contains lessons based on the most fundamental patterns of Spanish—the elements with which native speakers of Spanish form and produce sentences. The program is sequenced from easy to difficult and from concrete to abstract. The lessons are designed to present diverse situations created to exemplify syntactical structures, patterns of intonation, and vocabulary that students should learn. Pronunciation is stressed in early lessons in order to take advantage of the young child's ability and willingness to mimic and reproduce sounds. Vocabulary items are introduced only within the sentence structures being taught; they are not singled out and taught separately (i.e., students learn only enough vocabulary to manipulate the structures).

Basic language patterns and vocabulary are based upon: (1) The findings of several research studies conducted to analyze the language patterns of Spanish-speaking kindergarten and 1st-grade children; (2) formative and summative feedback from design-, pilot-, and field-test sites throughout the United States (Texas, California, Idaho, Pennsylvania); and (3) systematic comparative analysis of English and Spanish phonology, syntax, and semantics.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all bilingual oral language and reading (BOLAR) components.)

SUBJECT AREA(S)

Basic conversational Spanish language patterns are taught through a series of small-group activities. Lessons are presented as diverse situations created to exemplify specific language elements. The teacher encourages children to participate, first through dramatization in the form of dialogs with puppets and then through dialogs among themselves. This nonthreatening setting enables students to gain both the self-confidence and the language proficiency to read and write Spanish effectively and with understanding.

INTENDED USERS AND BENEFICIARIES

The component is intended for children whose native language is English or children who have little knowledge of Spanish.

GOAL(S) OR PURPOSE(S)

The four basic goals of the Spanish oral language component are to enable students: (1) To develop the ability to understand and reproduce Spanish language structures; (2) to develop the ability to understand and use basic Spanish language structures in communicative situations; (3) to develop understanding and appreciation of the culture, the customs, and the traditions of the Spanish-speaking population of the United States; and (4) to develop oral language competence in Spanish in order to be prepared for reading and writing.

PATTERNS OF USE

The lessons are sequential and cumulative.

ASSESSMENT PROVISIONS

The teacher assesses student progress by using the informal evaluations at the end of each lesson according to suggestions in the teacher's manuals. The teacher also administers a criterion-referenced mastery test designed primarily for postinstructional assessment. This test, which is easily administered and scored, may also be used as a diagnostic instrument to determine initial placement. One mastery test accompanies the teacher's manual.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes a day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher's manuals accompanying the student curriculum materials.

Because of the component's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. The ideal situation is that both of these individuals be bilingual; at least one of them should be. In cases of classrooms with no bilingual instructor, an arrangement may be worked out in which a bilingual teacher "rotates" or exchanges oral language responsibilities with a monolingual English-speaking teacher.

Teachers must familiarize themselves with the theoretical background and implementation procedures included in the Staff Development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher's manuals accompanying each strand of the product.

ASSURANCES AND CLAIMS

The *Bilingual Oral Language and Reading, Spanish Oral Language, Grade 2* (including portions of earlier versions, designated as *Language Development and Reading*, and adaptations of the materials by the SEDL followthrough program) has been used and tested in more than 50 classrooms in 4 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the BOLAR materials.

BOLAR instructional materials—including the Spanish oral language component—have been approved for statewide textbook adoption beginning in September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special interest groups. Testimony, solicited from these groups by the State textbook committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural group.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by other bilingual educators who are familiar with the program's instructional methodology. Since completion of field testing in 1973, more than 180 complete BOLAR curriculum packages have been purchased for classroom use. More than 30 others are using components of the BOLAR system. As the BOLAR materials represent the only grade-2 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Expresión Oral, Libro 3, manual	1 per instructor	5.95	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

DEVELOPER/AUTHOR:

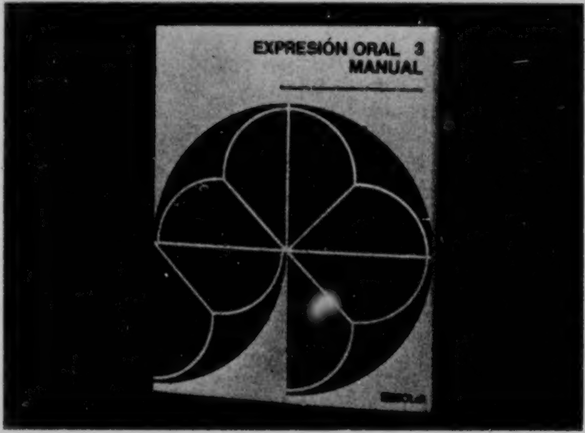
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Ernest M. Bernal, Jr., Program Director
Ricardo J. Cornejo, Program Coordinator

AVAILABILITY

The bilingual oral language and reading system with its eight components were copyrighted in 1972 with developmental copyright protection until 1979. It is currently available from the publisher/distributor. Order from:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767



INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 034

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH READING, GRADE 2

A product which makes use of the most relevant features of language experience: Sight reading and phonics for learners in grade 2

Bilingual Oral Language and Reading, English Reading, Grade 2, employs an eclectic approach which evolved as the result of: (1) Extensive research studies of the language patterns of bilingual children; (2) systematic comparative analysis of the phonology, syntax, lexicon, and semantics of both Spanish and English, and indepth analysis of decoding skills in both languages, from which evolved materials that minimize language interference and maximize positive language transfer in the reading process; and (3) formative and summative feedback from design, pilot, and field test sites throughout the United States (Texas, California, Idaho, Pennsylvania).

The product makes use of the most relevant features of language experience—sight reading and phonics. Language experience sharing takes place throughout the year because of its motivational nature and also because the teacher can incorporate both sight-word and phonic decoding strategies into the reading of children's dictated stories. A teacher's manual, *The Language Experience Approach to Reading*, contains information and guidelines for conducting language experience sessions.

Students participate in small-group reading activities in which the seven sight-word strategies (modeling, substituting, matching, framing, closing, dialoging, and composing) and phonic decoding skills are applied to the content of five student readers. Because pupils may encounter problems with some of the words and ideas in the readers, the accompanying teacher's manual, *Reading English, Book 3*, contains a story-by-story listing of the new words, along with probable means of word attack. Also listed are suggested comprehension questions and ideas for related compositions. Students are encouraged to read their books at a quick pace, with minimum teacher interference or checking. This unstructured approach evolves from the premise that reading skills develop primarily from the reading of connected materials; detailed, lengthy teacher instruction can prevent children from reading, so it is important to minimize such nonreading activity. The word-attack suggestions in the teacher's manual are to be used only with those children encountering difficulty with word recognition, comprehension, or fluency. The same unstructured approach is used when children read *The Yellow Bus*, a narrative containing 30 stories about the activities of one family. A teacher's manual bearing the same title contains probable word-attack skills, reinforcement activities, and evaluation procedures.

The product includes two student workbooks, *Basic Reading Skills, Book 3*, and *Basic Reading Skills, Book 4*, which are used concurrently with the two previously described strands. These workbooks introduce children to, and give children practice in, auditory recognition of long and short vowels and an orientation to the spelling patterns which produce these sounds. Other word elements dealt with are silent letters, initial and final consonants and blends, the function of "y" as a vowel, initial consonant blends, and initial digraphs.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all BOLAR components.)

SUBJECT AREA(S)

Three interrelated strands comprise this 2d-grade English-reading product. Language experience sharing, with its motivational nature and opportunities for application of word-attack skills, is used concurrently with the other two strands throughout the year.

Children also apply sight-word and phonic decoding skills to printed materials with minimal teacher assistance. They are designed to be interesting and challenging. The phonics strand deals with vowel sounds and other word elements and provides the child with continuously increasing word-attack skills.

INTENDED USERS AND BENEFICIARIES

The product is designed primarily for native Spanish-speaking students with minimal English language proficiency, although it can be used very effectively with native English speakers.

GOAL(S) OR PURPOSE(S)

The purpose is to involve students in reading through a meaningful combination of approaches: (1) Language experience sharing for motivation and application of word-attack skills, (2) semi-independent reading of printed materials, and (3) phonics activities to expand decoding skills.

PATTERNS OF USE

The lessons and activities within each strand are sequential and cumulative; the three strands are taught concurrently and/or alternately.

ASSESSMENT PROVISIONS

The teacher assesses language experience and independent reading progress through informal measures suggested in the teacher's manuals. The phonics workbooks include periodic evaluation pages. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. The product includes two comprehensive mastery tests.

TIME REQUIREMENTS

The product is designed to be used for an average of 30 minutes a day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site.

IMPLEMENTATION PROCEDURES

The product requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher's manuals accompanying the student curriculum materials.

Personnel Required for Product Adoption and Implementation

Because of the product's small-group approach and emphasis on individual progress, each user classroom should have one teacher and at least one instructional assistant. These individuals must familiarize themselves with the theoretical background and implementation procedures included in the staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*; they must also read the teacher's manuals accompanying each strand of the product.

Teaching the product does not require bilingual ability. However, in classrooms including native Spanish-speaking children, at least one of the instructional personnel should have some Spanish proficiency to be able to understand the children and make simple explanations. When the product is used in conjunction with corresponding Spanish products, a bilingual instructor is necessary.

The program is designed to be self-contained or replicable. However, teacher reaction from demonstration sites indicates that Southwest Educational Development Laboratory (SEDL) consultant services are extremely helpful.

ASSURANCES AND CLAIMS

The English reading product of the BOLAR system for grade 2 (including portions of earlier versions, designated as language development and reading, and adaptations of the materials by the SEDL followthrough program) has been used and tested in more than 90 classrooms in 5 States. Formative data obtained during this multiyear development process were used for program revision and refinement. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the BOLAR materials.

BOLAR instructional materials—including the English reading product—have been approved for statewide textbook adoption beginning September 1975 by the State Board of Education of Texas. During the State textbook approval process, the materials are made available for critical review by both professional and special interest groups. Testimony, solicited from these groups by the State Textbook Committee in open hearings, indicated that the products contained no materials considered to be biased toward any ethnic, sex, or cultural groups.

The BOLAR program has been field tested with predominately native Spanish-speaking migrant pupils with no direct interaction between program developers and program users. A 1-day preservice teacher-training session is considered beneficial for teachers who are not experienced in Spanish-English instruction. The training may be provided by SEDL or by persons who are familiar with the program's instructional methodology. Since completion of field testing in 1973, more than 180 complete BOLAR curriculum packages have been purchased for classroom use. More than 30 others are using products of the BOLAR system. As the BOLAR materials represent the only grade 2 bilingual curriculum for language instruction approved for Texas textbook adoption beginning in 1975-76, the number of users is expected to at least quadruple during the next year.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Basic Reading Skills, Book 3 (workbook)	1 set per 30 students	2.10	Consumable yearly	
Basic Reading Skills, Book 4 (workbook)	1 set per 30 students	1.80	Consumable yearly	
The Yellow Bus (workbook)	1 set per 30 students	3.75	Consumable yearly	
Reader 12 *School Days*	1 set of 15 per 30 students	.60	Reusable	
Reader 13 *José and Verónica*	1 set of 15 per 30 students	.60	Reusable	
Reader 14 *School's Out*	1 set of 15 per 30 students	.60	Reusable	
Reader 15 *Fun With Friends*	1 set of 15 per 30 students	.60	Reusable	
Language Approach to Reading, teacher's manual	1 per instructor	2.25	Reusable	
Reading English, Book 3, teacher's manual	1 per instructor	4.25	Reusable	
Basic Reading Skills, Book 3, teacher's manual	1 per instructor	7.50	Reusable	
Basic Reading Skills, Book 4, teacher's manual	1 per instructor	5.75	Reusable	
Basic Reading Skills, Book 4, flashcards	1 set per instructor	7.00	Reusable	
The Yellow Bus, teacher's manual	1 per instructor	9.00	Reusable	
Bilingual Program Handbook	1 per instructor	5.00	Reusable	
Theories of Language Learning and Reading	1 per instructor	5.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
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Austin, Tex. 78701

Ernest M. Bernal, Jr., Program Director
Ricardo J. Cornejo, Program Coordinator

AVAILABILITY

The Bilingual Oral Language and Reading System and its eight products were copyrighted in 1972 with developmental copyright protection until 1979. It is currently available from the publisher/distributor:

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 035

BILINGUAL ORAL LANGUAGE AND READING (BOLAR), SPANISH READING, GRADE 2

A product which makes use of the most relevant features of both the language experience and the sound-to-symbol approaches to reading instruction in grade 2

The 2d-grade Spanish reading program employs an eclectic approach which evolved as the result of: (1) Extensive research studies of the language patterns of bilingual children; (2) systematic comparative analysis of the phonology, syntax, lexicon, and semantics of both Spanish and English and indepth analysis of decoding skills in both languages, from which evolved materials which minimize language interference and maximize positive language transfer in the reading process; (3) an analysis of 15 reading programs for the purpose of identifying methodological patterns in the teaching of reading in Spanish-speaking countries; (4) formative and summative feedback from design, pilot, and field test sites throughout the United States (Texas, California, Idaho, and Pennsylvania); and (5) interviews with bilingual children in Texas, California, and Pennsylvania to determine their interests. The topics in the Spanish readers were selected from a list prepared during these interviews.

The component makes use of the most relevant features of both the language experience and the phonic, sound-to-symbol, approaches to reading instruction. Language experience sharing takes place throughout the year because of its motivational nature and also because the teacher can incorporate phonic decoding skills into the reading of children's dictated stories. Children participate in small-group sessions during which they dictate and read stories about their own interests. A teacher's manual, *Lectura a Base de Experiencias*, contains information and guidelines for conducting language experience sessions. Another manual, *Composicion Oral y Escrita*, is designed to help children develop the capacity to relate their own experiences to verbal and written expression. This manual contains a series of lessons based on everyday experiences, problem-solving situations, and other topics intended to develop critical thinking and self-expression; it is intended for use throughout the year and ultimately results in original compositions written by students.

Because of the close correlation between the Spanish letters and their sounds, the phonic, sound-to-symbol, approach is used systematically throughout the Spanish reading program. The skills workbook, *Lectura y Escritura, Libro 3*, includes reading, writing, and comprehension exercises for diphthongs, consonants, and consonant clusters. A teacher's manual bearing the same title accompanies the student workbook. A series of five readers complements and reinforces the skills books. These readers are designed and written for children to read independently after specific skills buildups, allowing immediate application of learned skills to interesting and appropriate reading materials and providing incentive for further reading. Another skills book, *Lectura y Escritura, Libro 4*, presents a series of stories which form a narrative about the activities of one family; this book also includes reading and writing skills and comprehension exercises. A teacher's manual bearing the same title also accompanies this skills book. The 2d-grade series also includes a supplementary reader, *El Mago Maravillas*, which children read independently after finishing the other readers.

Two staff development manuals, *Theories of Language Learning and Reading* and *Bilingual Program Handbook*, present both theoretical background and implementation guidelines. (Note: These manuals are applicable across all BOLAR components.)

SUBJECT AREA(S)

The component is composed of two interrelated approaches to reading instruction: The language experience approach and the phonic, or sound-to-symbol approach. Language experience sharing, with its motivational nature and opportunities for application of word-attack skills, is used throughout the year concurrently with a program of phonic decoding skills, writing, and comprehension exercises. Children apply their skills to printed materials, or student readers, with minimum teacher assistance.

INTENDED USERS AND BENEFICIARIES

The component is designed for use with native Spanish-speaking students or with native English-speakers after prior oral language instruction.

RD 110 035

GOAL(S) OR PURPOSE(S)

The goals of this program are to involve children in reading through a meaningful combination of approaches: (1) Language experience sharing for motivation and application of word-attack skills, (2) semi-independent reading of printed materials, and (3) phonics activities to expand cumulative decoding skills.

PATTERNS OF USE

The lessons and activities within each strand are sequential and cumulative; the strands are taught concurrently and/or alternately.

ASSESSMENT PROVISIONS

The teacher assesses student progress in language experience and composition through informal measures suggested in the teacher's manuals; the skills books include an evaluation page at the end of each lesson. The teacher also administers criterion-referenced mastery tests designed primarily for postinstructional assessment. These tests, which are easily administered and scored, may also be used as diagnostic instruments to determine initial placement. One mastery test accompanies each of the student workbooks.

TIME REQUIREMENTS

The component is designed to be used for an average of 30 minutes per day for 1 year, an estimate that is very flexible in terms of daily scheduling. The actual amount of time spent in the component's small-group activities depends upon several factors. These include: (1) The language dominance of individual class members, (2) the range of developmental levels represented in the class, (3) the total number of students in the class, (4) the number of adults present in the classroom, and (5) other circumstances prevailing at the user site(s).

IMPLEMENTATION PROCEDURES

The component requires no special equipment or facilities. Because the product is transportable, or self-contained, no teacher training is necessary if each participating teacher becomes thoroughly familiar with the information presented in the two staff development manuals and the teacher's manuals accompanying the student curriculum materials.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Staff development				
Bilingual program handbook		6.67	Reusable	
Theories of language learning and reading		6.67	Reusable	
Grade 2 - Lectura (Spanish):				
Lectura a Base de Experiencias, Manual	1 per teacher	3.33	Reusable	
Composicion Oral y Escrita, manual	1 per teacher	3.93	Reusable	
Lectura y Escrita, Libro 3, manual	1 per pupil	13.33	Reusable	
Lectura y Escritura, Libro 3, Cuaderno	1 per pupil	4.84	Reusable	
Lectura y Escritura, Libro 4, manual	1 per teacher	10.93	Reusable	
Lectura y Escritura, Libro 4, Cuaderno	1 per pupil	4.00	Reusable	
Lector 6 Escuchemos al los Animales	1 per pupil	.67	Reusable	
Lector 7 Lo Que Comemos	1 per pupil	.73	Reusable	
Lector 8 Mi Escuela	1 per pupil	.73	Reusable	
Lector 9 Cuentos y Versos	1 per pupil	.73	Reusable	
Lector 10 Nuestro Lenguaje	1 per pupil	.73	Reusable	
El Mago Maravillas		2.67	Reusable	
Lectores (Spanish Readers) 6 through 10 (30 of each)		107.70	Reusable	
Lectores (Spanish Readers) 6 through 10 (15 of each)		53.85	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
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Ricardo J. Cornejo, Program Coordinator

AVAILABILITY

National Educational Laboratories Publishers, Inc.
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 036

ABE READINESS MATERIALS

Bilingual instructional packages to fill the void in materials available for teaching undereducated Mexican-American adults

The *ABE Readiness Materials*, which consists of three instructional packages, has been developed to help fill the void in instructional materials available for teaching the undereducated Mexican-American adult.

A bilingual approach has been undertaken to provide various entry levels for the Spanish-speaking adult. Instruction in the English readiness package is given primarily in Spanish, while Spanish and English are utilized for the consumer buying package. The job application package is taught in English only.

The English readiness package teaches the Spanish-speaking adult 30 common English words, the alphabet, and the English word sounds for the alphabet. The comparative buying package deals with necessary competencies required for family spending through use of shopping and money management techniques. The job application package contains materials and techniques for instructing the non-English Spanish speaker in the coping skills for securing employment.

SUBJECT AREA(S)

Adult education

The English readiness package consists of three interrelated teaching units which are directed at the Spanish-speaking adult who has no understanding of English.

The comparative buying package is designed to develop the necessary competencies required to plan family spending through utilization of shopping and money management techniques.

The job application package assists the Mexican-American in learning to complete an employment application, and provides him with information and techniques for creating a favorable impression during an interview.

INTENDED USERS AND BENEFICIARIES

The intended product users are teachers and teacher aides; the ultimate intended beneficiaries are non-English-speaking, Spanish-speaking adults.

GOAL(S) OR PURPOSE(S)

The objectives of this product are to motivate and to recruit hardcore students.

PATTERNS OF USE

The bilingual approach has been undertaken. The English readiness package is given primarily in Spanish; Spanish and English are used for the comparative buying package.

Each of the three packages utilizes various media.

1. The English readiness package consists of: Unit I (seven topics)—teacher flash cards, slides, and student worksheets; unit II—five tapes, lessons, and student workbooks; and unit III—six content lessons which provide pronunciation and sound discrimination drills.
2. The comparative buying package consists of filmstrips, tapes, and workbooks.
3. The job application package consists of five lessons, each supplemented by instructional tapes, slides, and a student handbook.

ASSESSMENT PROVISIONS

The packages include diagnostic tests, unit evaluations, postevaluations, and posttests simulating life situations.

TIME REQUIREMENTS

Requirements vary and are dependent upon entrance level of participants. Package 1 is geared to zero level English proficiency; package 2, to the intermediate level; and package 3 (the only package entirely in English), to advance proficiency.

IMPLEMENTATION PROCEDURES

The product is nonconsumable and amenable to extensive reuse. All packages in the program use various media including slide/tape presentations, lecture, slides, flash cards, and handbooks. The packages have been designed in three levels to provide an appropriate entry level for the Spanish-speaking adult. Clarity of communication is provided via the bilingual nature of the levels.

The product is complete and stands alone. Any equipment necessary is readily available in any school. No significant organizational changes are required to implement the packages. Maintenance requires only normal care.

Personnel Required for Product Adoption and Implementation

No consultants are required, nor is special training necessary. No adoption costs are intrinsic to the product, which can be used with large groups; the product stands complete.

ASSURANCES AND CLAIMS

This product was designed for use by teachers of undereducated non-English-speaking Spanish speakers and was tailored to include areas of particular interest and concern to the low-socioeconomic levels usually coexisting with non-English-speaking status. Special attention was paid to design of material appropriate to both men and women and to presenting lessons in Spanish and English.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learning English package (3 units, tapes, flashcards, workbooks, evaluation test)	1 per setting	205.00	Reusable	
Comparative buying package (tapes, slides, workbooks, tests)	1 per setting	205.00	Reusable	
Job application package (tapes, slides, workbooks, tests)	1 per setting	205.00	Reusable	

Note: Packages may be purchased and used separately.

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

Copyright is pending. *ABE Readiness Materials* is available from:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 037

SYSTEMS APPROACH TO LESSON PLANNING PACKAGE

Teacher training materials for conversion of written objectives to lesson plans

The *Systems Approach to Lesson Planning Package* provides teachers with training on techniques for converting written objectives to lesson plans through utilization of the teaching systems matrix.

The matrix is a recordkeeping tool by which the teacher can record planned entry conditions, teaching procedures, and learner outcomes, as well as what actually happens. In this way, the teacher can decide what to do if the actual outcomes do not meet those that are planned.

SUBJECT AREA(S)

Teacher Training. Techniques for converting written objectives to lesson plans utilizing the teaching system matrix.

Lessons include:
- Lesson I—Introduction and Terminology
- Lesson II—The Teaching Systems Matrix
- Lesson III—Logical Contingency Relationships
- Lesson IV—Empirical Contingencies
- Lesson V—Troubleshooting
- Lesson VI—Adaptive and Corrective Strategies

INTENDED USERS AND BENEFICIARIES

The intended users are adult education teachers, elementary and secondary teachers and aides, school administrators, and university administrators. The beneficiaries are students of all ages.

GOAL(S) OR PURPOSE(S)

The major goal of this package is to provide training for teachers in conversion of written objectives to lesson plans.

PATTERNS OF USE

Specific activities include utilization of the learning system's terminology and parts of a teaching systems matrix, identification of planning statements which match or mismatch the actual event, and identification of probable sources of instructional problems and practices, using the matrix as a teaching tool to improve planning involvement in a simulated teaching situation to practice purposes for using the matrix subsystem.

ASSESSMENT PROVISIONS

A pretest determines the teacher's entry level, and a reaction form is included to be completed and mailed to SWCEL after the participants have actually used the systems approach in their own teaching environment.

TIME REQUIREMENTS

The learner time to complete instruction is approximately 1 day.

IMPLEMENTATION PROCEDURES

This product is nonconsumable and can be reused extensively. The product does not require a consultant from the laboratory and is self-instructional. The package involves slide/tape media and workbooks, and has been constructed to correspond to the language and reading ability of professional teachers. This product is, by its very nature, adaptable to certain local needs and constraints such as flexibility in number of participants to be trained, site for training, and extensive variety of types of existing programs to which the *Systems Approach to Lesson Planning* is adaptable.

Very few, if any, preexisting user constraints are involved in installation of this product. In addition, there are no organizational changes or maintenance requirements beyond those already required in a classroom with durable items.

The product is very adaptable and flexible to use in varied circumstances. Developers are not required for any stage of program installation or use. No auxiliary materials or services are required that are not present in any potential product-use site.

The two components—the series and materials for student use—are rented and sold separately because they are flexible and adaptable to use together or as stand-alone products.

The use and nature of the product is simple to understand; it is durable, and all component and auxiliary materials have been field tested and evaluated for use under varied circumstances before product rental was undertaken. Little, if any, organizational change would be required except that resulting from initial decisionmaking involved in rental of the product.

Community reactions were considered and evaluated in field testing. The product was found to work well with any potential users in the target group—the adult literate (or illiterate) Spanish-speaking, urban or rural population.

Summary Cost Information

Total installation and continuation costs depend upon the rental period and the number of adult learners for whom supplementary materials are purchased.

Personnel Required for Product Adoption and Implementation

A program coordinator would be required and television station services can be enlisted on a community-service basis. Neither consultants nor training is required; however, some support staff time might be necessary depending on the installer's goals and size of the target group to be reached.

ASSURANCES AND CLAIMS

The product is unique in itself since it uses a particular system to train teachers and others to convert behavioral objectives to actual lesson plans and evaluate the success of the conversion.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Package of slide/tapes and 30 workbooks	1 package for 30 participants	199.00; 2.00 for replacement of workbooks	Reusable; workbooks consumable	
Video tapes or kinescopes	30	300.00 for 30 days,* 1,200.00 for 6 months, 2,000.00 for 1 year	Reusable	
6 volumes containing 30 lessons, paper-and-pencil materials	1 for each student	18.00 per set,** 18.00 for replacement set	Consumable	

*Rental price
**Purchase price

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

The *Systems Approach to Lesson Planning Package* is available from the developer. Copyright is pending. Order from:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 038

EMPLEEN INGLÉS

A series of 31 films designed to teach English to Spanish-speaking adults

The *Empleen Inglés* series consists of 30 half-hour films which are designed to teach English to non-English speakers. The films have been developed to achieve specific linguistic and cultural relevance, and each may be used as a complete instructional unit. The films emphasize practical applications of oral English language ability in completing application forms, comprehension of weights and measures, counting money, telling time, reading traffic signs, oral communication in grocery shopping and visiting a doctor's office or medical clinic, and communicating with the child's teacher.

The films, designed to be shown on television, enable the student to learn at home without the presence of a teacher. The adult student can watch a film, recognize the situation, and say, "That's me." The series deals with such topics as consumer education, the handling of tools, home nursing care, personal hygiene, and parent-child relationships.

SUBJECT AREA(S)

Adult basic education is the subject area.

This series consists of 30 half-hour films or video tapes which utilize true-to-life situations.

INTENDED USERS AND BENEFICIARIES

The intended product users are adult basic education programers, migrant camp directors, parish priests, and union leaders. The product may be used by any organization or program administrator desiring to institute or strengthen adult education classes.

The ultimate product users are adult Spanish speakers—rural stationary, rural migrant, urban Mexican-American, Puerto Rican, Cuban, or other Spanish-speaking individuals or community study groups in low socioeconomic groups who are not reached by conventional educational methods.

GOAL(S) OR PURPOSE(S)

The major goal of this product is to teach English to the Spanish-speaking adult in any of various learning settings, using an innovative instructional scheme.

PATTERNS OF USE

There are 30 video programs based on innovative instructional features such as rhythmic voice patterns, musical effects, choreography, cartoon effects, realistic characters, and animation in a bilingual language setting such as Spanish and English. Thirty written lessons, "Empleen Inglés, Materiales Para Estudiar en Casa," supplement the series. Although the films and written materials are correlated, they may be used separately. As there are frequently English-speaking children in the home, materials are designed at the primary level in order that these children might assist in instruction. While the programs were designed to use local telecasting facilities as a means of reaching the adult non-English speaker at home, it can also be used in movie form in a classroom setting.

ASSESSMENT PROVISIONS

A complete and reliable measuring instrument reflecting the content components and objectives of the program was designed to ascertain the English language oral proficiency of Spanish-speaking Americans. This test instrument consists of six parts, with particular reference to three attitudinal factors and three linguistic variables. The instrument is bilingual in nature, incorporating Spanish in the instructions and Spanish and English in the content. The linguistic variables included in the instrument are English comprehension, English usage, and English vocabulary. The attitudinal variables are attitudes toward English usage, attitudes toward program characters and situations, and attitudes toward other features of the programs such as dancing, culture, and eating. The instrument can be used as a pretest and posttest instrument relative to 30 paper-and-pencil lessons and/or with the video-field-testing instrument relative to content in the *Empleen Inglés* video programs.

TIME REQUIREMENTS

The video programs are consecutive and can be presented daily or on a distributed-time base (every other day for three lessons weekly). The distributed time arrangement presents unique advantages in terms of feasibility for telecasting, given the programing time restraints prevalent in most areas.

IMPLEMENTATION PROCEDURES

This audiovisual material is available on a rental basis and has been evaluated as appropriate, economical, and comprehensible for the group to which they are directed. Lessons can be presented to large target audiences in their homes by telecasting or on film in a classroom setting. The paper-and-pencil materials are deliberately designed so that children in the home might help instruct the non-English-speaking adults in the home.

The product is very adaptable and flexible for use in varied circumstances. Developers are not required for any stage of program installation or use. No auxiliary materials or services are required that are not present in any potential product-use site.

The two components—the series and materials for student use—are rented and sold separately for the very reason that they are flexible and adaptable to use together or as stand-alone products.

The use and nature of the product are very simple to understand and use; it is durable, and all component and auxiliary materials have been field tested and evaluated for use under varied circumstances before product rental was undertaken. Few, if any, organizational changes would be required except those resulting from initial decisionmaking involved in rental of the product.

Community reactions were considered and evaluated in field testing. This product was determined to work well with any potential users in the target group—the adult literate (or illiterate) Spanish-speaking urban or rural population.

Summary Cost Information

Total installation and continuation costs depend upon the rental period and the number of adult learners for whom supplementary materials are purchased.

Personnel Required for Product Adoption and Implementation

A program coordinator would be required. Television station services can be enlisted on a community-service basis. Consultants or training are not required; however, some support staff time might be necessary, depending on the installer's goals and size of the target group to be reached.

ASSURANCES AND CLAIMS

In the final analysis, it has been unequivocably concluded that the *Empleen Inglés* video program and paper-and-pencil lessons produce dramatic and significant gains in English comprehension, English usage, and English vocabulary. It has also been concluded that using a combination of the program's video and paper-and-pencil lessons produces greater learning effects than the use of a single-instructional medium (video or paper-and-pencil lessons). The *Empleen Inglés* video series may be used as a separate instructional medium; however, greater gains can be achieved when the paper-and-pencil lessons are used as a supplementary and reinforcement medium.

The field testing results revealed that the target populations in the study perceive the video program characters, situations, choreography, and other entertainment features in a favorable light. While technical observers and educators may provide suggestions for further improvisation, negative attitudes toward the video programs appear relatively absent among the participants in the study conducted.

The findings in the field testing do not imply that complete fluency in oral English communication has been achieved by the two instructional programs. It is conceivable that 30 video programs and paper-and-pencil lessons can produce this ultimate effect. However, based on the language content provided in the programs and measured by specifically designed test instruments, it can be concluded that the 30 program exposures are dramatically effective in oral English development.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Video tapes or kinescopes	30	300.00 for 30 days;* 1,200.00 for 6 months; 2,000.00 for 1 year	Reusable	
6 volumes containing 30 lessons, paper, and pencil materials	1 for each student	18.00 per set;** 18.00 for replacement set	Consumable	

*Rental price.
**Purchase price.

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

Copyright is pending. The *Empleen Ingles* series and accompanying paper-and-pencil materials are available from:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

PERFORMANCE OBJECTIVES PACKAGE

A product developed to provide teachers with a tool by which they can determine what their adult students want to learn

The *Performance Objectives Package* was developed to provide teachers with a tool by which they can determine what they want the student to learn. The use of performance objectives defines the behaviors the student will demonstrate after learning the material and how they will be evaluated.

The package is especially designed to enable adult education teachers to apply performance objectives to their teaching. Performance objectives have two major advantages. First, the student knows exactly what must be done to meet the teacher's expectations. Secondly, the teacher is able to pinpoint what overt behavior is expected of the student and what the student must know before meeting a particular objective. In this way, the teacher can determine whether instructional goals have been reached.

SUBJECT AREA(S)

Teacher education: Performance objectives as a teaching tool.

The package contains slide/tape presentations and a workbook. Six lessons, as well as a pretest and posttest, are included in the workbook which outlines goals and objectives, the instructional program, the three domains (cognitive, affective, and psychomotor), entering behaviors, components of a behavioral objective, and how to write performance objectives.

INTENDED USERS AND BENEFICIARIES

The intended users are adult education teachers, and the ultimate product beneficiaries are students in adult education classes.

GOAL(S) OR PURPOSE(S)

The purpose of the *Performance Objectives Package* is to provide teachers with a tool by which they can determine what they want a student to learn. The use of performance objectives defines the behaviors the student will demonstrate after learning the material and how it will be evaluated. The overall objective is to enable adult education teachers to apply performance objectives to their teaching.

PATTERNS OF USE

Teachers with no previous knowledge or experience in performance objectives move through six planned lessons to the point at which the ability to write performance objectives is achieved. At the completion of the six lessons, teachers write and exchange performance objectives and offer an evaluation and criticism of each other's work.

ASSESSMENT PROVISIONS

Prior to the beginning of the six lessons, the teacher is given a diagnostic pretest. At the completion of the lessons, a posttest is administered to determine knowledge of the materials.

TIME REQUIREMENTS

Learner time required to complete instruction is 4 hours.

IMPLEMENTATION PROCEDURES

The product is not consumable and can be reused extensively. It utilizes slides with accompanying tapes and workbooks geared to the abilities of the adult teacher. The product can be used on a stand-alone basis and is designed for flexibility and adaptability to a multitude of learning areas.

The developer is aware of no preexisting or other consumer restraints which limit the use of this product. Only minimal, temporary organizational or other changes are required for the period of instruction and the training of the implementer.

Summary Cost Information

Total installation depends upon the number of program participants since a workbook is required for each. Average cost would also depend upon the number of individuals to be trained.

ASSURANCES AND CLAIMS

All SWCEL products were developed to meet the needs of minority populations. The unique education intervention made necessary by the special requirements of minority target groups was the purpose for the founding of the laboratory.

While many performance objectives programs offer instruction mainly in the cognitive (knowledge) domain, SWCEL's packages also emphasize their use in the affective (emotional) and psychomotor (physical skills) domain since the three are closely related.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Package containing slide/tapes and workbooks	1 package for 30 participants	139.00; 3.00 for replacement of workbooks	Reusable; workbooks consumable	

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

The *Performance Objectives Package* is available from the developer. Copyright is pending. Order from:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 040

BILINGUAL BALANCE TESTS

A set of comprehensive tests to measure the Spanish and English language skills of students, grades 1-7, coming from homes where only Spanish is spoken

Bilingual Balance Tests introduces a new element into the testing of students whose home or "native" speech differs from standard English. The test battery, for use with pupils in the elementary grades, includes tests of Spanish-speaking children's total language proficiency in both Spanish and English. Also under development are tests of teachers' attitudes toward nonstandard English or Spanish. Related research is investigating whether such teachers' attitudes toward the nonstandard speech of their pupils are related to pupil achievement. Pupils' attitudes toward nonstandard English will also be measured.

The pupil achievement tests measure vocabulary, grammar, and language production in both Spanish and English, making use of verbal (written or tape-recorded) and pictorial stimuli. A brief manual explains the purpose of the student test battery and provides directions for its administration and interpretation.

SUBJECT AREA(S)

Subject areas include evaluation, language arts, and bilingual education for children in grades 1 through 7.

INTENDED USERS AND BENEFICIARIES

The tests are for use with Spanish-speaking students from a variety of backgrounds in grades 1-7 and their teachers. The present battery has been used in grades 1, 3, 5, and 7. The tests are suitable for use in bilingual education (where instruction is given in Spanish as well as English) and conventional programs.

GOAL(S) OR PURPOSE(S)

Bilingual education is now recognized as a national priority. However, the need for teacher awareness of the total language competencies of Spanish-speaking children is not always recognized. Use of the pupil achievement tests and the teacher and pupil attitude tests is expected to improve teachers' awareness of their Spanish-speaking students' total language competence, the effectiveness of those teachers, and, consequently, the achievement in standard English of their Spanish-speaking students.

PATTERNS OF USE

The pupil achievement tests may be used in conjunction with regular classes. For diagnostic purposes, it is recommended that they be used early in the year. Administration in successive years will provide data on pupil progress toward linguistic balance; i.e., proficiency in standard English as well as Spanish.

ASSESSMENT PROVISIONS

The entire package is an assessment package. The teacher's manual contains preliminary data on validity and reliability for the tests.

TIME REQUIREMENTS

Vocabulary and multiple-choice grammar tests (group administration), 25 minutes each; language production test (administered individually), 30 minutes; and attitude tests (group administration), 40 minutes each are the time requirements.

IMPLEMENTATION PROCEDURES

The teacher's manual provides a context for the tests, explains their objectives, and gives directions for their use.

ASSURANCES AND CLAIMS

Field testing of earlier versions of the tests was carried out by SCRDT personnel with approximately 700 Spanish-speaking students in 5 locations. Experience indicates that the tests, when accompanied with a teacher's manual, are self-contained and transportable. The production tests can be administered only by Spanish-speaking teachers. No evidence of social bias or harmfulness appeared during the field tests. Final data on validity and reliability on the pupil achievement tests will appear in the teacher's manual.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil achievement tests	1 set per student	To be determined (minimal)	With each administration; may be duplicated on site	To be determined
Teacher's manual	1 per teacher	To be determined (minimal)	Reusable	To be determined

DEVELOPER/AUTHOR:

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

Robert L. Politzer, Program Director

AVAILABILITY

The pupil achievement tests, preliminary versions of the teacher and pupil attitude tests, and the teacher's manual will be completed by December 1975. For further information please write:

Director, Publications and Dissemination
Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 041

BIDIALECTAL BALANCE TESTS

A set of comprehensive tests to measure the language skills of students grades 1-6 coming from homes where standard English is not spoken

Bidialectal Balance Tests introduces a new element into the testing of students whose home or "native" speech differs from standard English. The test battery, for use with pupils in the elementary grades, includes tests of black children's total language proficiency. Also under development are tests of teachers' attitudes toward nonstandard English. Related research is investigating whether such teachers' attitudes toward the nonstandard speech of their pupils are related to pupil achievement. Pupils' attitudes toward nonstandard English will also be measured.

The pupil achievement tests measure discrimination, repetition, and language production in both "black standard" and "black nonstandard" English, making use of verbal (written or tape-recorded) and pictorial stimuli. A brief manual explains the purpose of the student test battery and provides directions for its administration and interpretation.

SUBJECT AREA(S)

Subject areas involve evaluation, language arts, and bidialectical education for students in grades 1-6.

INTENDED USERS AND BENEFICIARIES

The tests are for use with black students from a variety of backgrounds in grades 1-6 and their teachers. The present battery has been used in grades 1, 3, and 6.

GOAL(S) OR PURPOSE(S)

Consideration of the role of language varieties other than white standard English in education is now recognized as a national priority. The need for teacher awareness of the total language competencies of black children is not always recognized. Use of the pupil achievement tests and the teacher and pupil aptitude tests is expected to improve teachers' awareness of their black students' total language competence, the effectiveness of those teachers, and, consequently, the achievement in standard English of their black students.

PATTERNS OF USE

The pupil achievement tests may be used in conjunction with regular classes. For diagnostic purposes, it is recommended that they be used early in the year. Administration in successive years will provide data on pupil progress toward linguistic balance, i.e., proficiency in standard as well as nonstandard (black) English.

ASSESSMENT PROVISIONS

The entire package is an assessment package. The teacher's manual contains preliminary data on validity and reliability for the tests.

TIME REQUIREMENTS

Discrimination test (group administration), 25 minutes; and repetition and production tests (administered individually), 35 minutes each

IMPLEMENTATION PROCEDURES

The teacher's manual provides a context for the tests, explains their objectives, and gives directions for their use.

ASSURANCES AND CLAIMS

Field testing of earlier versions of the test was carried out by black research assistants and consultants with approximately 550 black students in 2 locations. Experience indicates that the tests, when accompanied with a teacher's manual, are self-contained and transportable. Since the stimuli are recorded, whites could administer the tests, but administration of the nonstandard black English production test by whites is not recommended. No evidence of social bias or harmfulness appeared during the field tests. Final data on validity and reliability of the pupil achievement tests will appear in the teacher's manual.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Pupil achievement tests	1 set per student	To be determined (minimal)	With each administration; may be duplicated on site	To be determined
Teacher's manual	1 per teacher	To be determined (minimal)	Reusable	To be determined

DEVELOPER/AUTHOR:

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

Robert L. Politzer, Program Director

AVAILABILITY

The pupil achievement tests, preliminary versions of the teacher and pupil attitude tests, and the teacher's manual will be completed by December 1975.

For further information please write:
Director, Publications and Dissemination
Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 042

SOBER-ESPAÑOL

An objectives-based system to assess reading achievement in Spanish, for students in grades K-3

SOBER-Español is an objectives-based system to assess reading achievement in Spanish. SOBER is an acronym for System for Objectives-Based Evaluation in Reading. The system has been designed as a tool to measure students' progress in the English-Spanish bilingual programs. The basic rationale of *SOBER-Español* is that teachers, evaluators, program directors, and coordinators should be able to select assessment instruments to meet specific objectives of the local curriculum.

The system developers have researched the areas of basic reading skills, comprehension, and creative expression in Spanish; they have also analyzed English and Spanish reading skills for common and differing areas. The general areas of the reading domains in Spanish have been identified and classified.

The system contains criterion-referenced objectives and test items for grades K-3. The process of writing objectives and test items for grades 4-6 is now underway. When completed, the system will have the capability of generating either comprehensive assessment instruments or short tests to measure Spanish reading achievement in grades K-12.

SOBER-Español tests can be used for pretesting, for posttesting, and as an interim measure at various points during an instructional program. For each testing period, 10 to 40 objectives are selected from a comprehensive collection of all reading objectives. A test is then constructed, "tailor-made" to the specified objectives. The publisher provides three test items for each objective, prepares test booklets, and sends the customized tests and examiner's instructions to the schools. Scoring provides three types of information: Individual student reports, group results, and a distribution showing which objectives the students have mastered and on which they have not mastered.

SUBJECT AREA(S)

Subject areas include evaluation, Spanish, language arts, and bilingual education.

INTENDED USERS AND BENEFICIARIES

Teachers and administrative personnel at the school, district, State, regional, and Federal levels responsible for decisions concerning resource allocation, classroom management, curriculum planning, and instructional program evaluation in the area of bilingual education are the intended users.

Students of all reading abilities in grades K-12, Spanish-English bilingual programs are the ultimate users and beneficiaries of *SOBER-Español*.

GOAL(S) OR PURPOSE(S)

The purpose of the *SOBER-Español* system is to provide assessment instruments relevant to local (or other aggregate) reading programs in order to generate information needed to make decisions concerning resource allocation, classroom management, curriculum planning, and program evaluation and improvement.

PATTERNS OF USE

SOBER-Español is used for pretesting, posttesting, and interim testing; this could be for programs varying from a short teaching unit (1 month) to a 1-year program. It will be used in a variety of bilingual (English-Spanish) programs.

ASSESSMENT PROVISIONS

SOBER is an assessment system.

TIME REQUIREMENTS

Time requirements vary depending on the selected pattern of use; students spend from 20 minutes to a maximum of 15 hours per year using SOBER tests. Administration (proctor or teacher) time is approximately the same as student time. Administrator (decisionmaking) time will vary with each user.

IMPLEMENTATION PROCEDURES

As an optional, special service, scoring can be provided by the publisher.

ASSURANCES AND CLAIMS

As in any testing situation, extreme pressure to perform well can cause mental anguish in some students. The test selector is advised as a normal part of the selection procedure, however, to select objectives at an appropriate level of difficulty. The flexibility inherent in SOBER makes it possible to avoid items of extreme difficulty, something that cannot be controlled in traditional achievement tests. This same flexibility—user control of test content—provides assurance of the appropriateness of test content. Technical accuracy is assured by a thorough development and review process.

Reading passages in SOBER were developed with the intent of avoiding stereotyped roles of people (e.g., on the basis of age, sex, race, or religion). Reading passages and test items have been written and reviewed by bilingual educators who are representative of the following ethnic orientations: Honduran, Mexican, Cuban, Chilean, and Puerto Rican. To the best of the developer's knowledge, there is no social bias in any of the content.

Administration of SOBER tests is completely explained in a user's guide as well as in the administrator's copy of each test. No difficulties in test administration have been encountered in the field. Printing, delivery, and scoring of tests are all handled by Science Research Associates, Inc., a well-known and respected educational publisher. No problems of transportability are envisioned with SOBER.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars*	Replacement Rate and Cost	Source if Different from Distributor
Student test booklet:				
a. Custom tests	1 per student	Average .60 per student**	Grades K-2: Replace with each use; grades 3-12: Reusable when testing same objectives—then, replace approx. every 4th use	
b. Catalog tests (predetermined content)	1 per student	Average .45 per student** (minimum order 12.50)	Replace approx. every 4th use	
Answer sheets	1 per student	Approx. .01 per student****	Consumable	
Catalog of objectives	1 per 25 students	3.25***	Reusable	
Guide to SOBER-Español	1 per 25 students	.64***	Replace approx. every 4th use	
Examiner's manual	1 per 25 students	.64***	Grades K-2: Replace each testing; grades 3-12: Replace approx. every 4th use	
Supplemental items:				
Machine scoring and reporting	1 per student	Average, .75 per student **		

*All prices and other information in this section were estimated on the basis of an English language system produced by the CSE.

**Varies with number of students and/or objectives tested.

***Price, if bought separately. Included in test booklet price if customized booklets are ordered.

****No charge if user has Science Research Associates score the tests.

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Ricardo Cornejo, Project Director

AVAILABILITY

SOBER for grades 4-6 will be available in 1976; SOBER for grades 7-12 will be available at a later date.

SOBER-Español for grades K-3 will be available in fall 1975 from:

SOBER-Español Operations Department
Science Research Associates, Inc.
259 East Erie St.
Chicago, Ill. 60611

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 110 043

BLACK DIALECTS AND READING

A book for teachers of black children to improve the effectiveness of language and reading instruction

This book offers direction for the teacher who wants to know what can be done to improve the effectiveness of language and reading instruction. Part 1 focuses on the issues in teaching black children to read and provides the teacher with an orientation to some of the specific problems in the field such as the question of the existence and nature of black dialects, whether black English speakers should be taught standard English, and what teachers need to know to be effective in the classroom which includes dialect speakers. Diagnostic tools are described in part 2 so that the teacher can identify the language base on which to build individual programs. Articles in part 3 suggest classroom strategies for teaching oral standard English to nonstandard speakers. Part 4 provides materials which guide teachers in assisting dialect speakers in their special problems with correspondence between spoken forms and written symbols in beginning reading. Part 5 contains the edited transcripts of the proceedings from a conference, which provide a framework for understanding the questions that the English of blacks raises in the teaching of reading. Two special resources for teachers, including an annotated bibliography of materials on language, dialects, and reading, comprise part 6.

SUBJECT AREA(S)

Beginning reading, language experience approach, language handicaps, Negro dialects, nonstandard dialects, oral English, psycholinguistics, reading instruction, reading materials, reading processes, reading skills, and Tenl.

INTENDED USERS AND BENEFICIARIES

The intended users of this book are teachers, especially those teaching black children; college professors; and curriculum coordinators.

DEVELOPER/AUTHOR:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 086 949, $0.76 (microfiche), $10.78 (paper), add $0.42 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available at a cost of $3.95 for nonmembers and $3.75 for members. Order Catalog No. 00572:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 110 044

DIALECTS AND DIALECT LEARNING

A self-contained inservice program for elementary and secondary schoolteachers aimed toward teacher understanding of nonstandard dialects

Dialects and Dialect Learning is a self-contained inservice program for elementary and secondary teachers to enhance teacher understanding of the major nonstandard dialects in America. It provides information about dialects in general, the phonetics of American English, and features of nonstandard usage which commonly occur in American speech.

Dialects and Dialect Learning provides basic information and skills both for teachers who wish to modify their procedures in teaching standard English usage and for teachers who merely wish to understand more fully this sensitive and important topic. Much of the program focuses on enlarging the teacher's understanding of linguistics and of language as a social medium. The ultimate objective of this program and its companion program, *Learning a Standard English*, is to prepare teachers to individualize instruction in dialects and usage and help youngsters acquire control of major features of the standard dialect of their region, features they can use or not use—according to the dialects of given situations.

SUBJECT AREA(S)

Four self-instructional units comprise the programed course for the instruction of elementary and secondary teachers in understanding the major nonstandard dialects in America.

The units include: a program of basic information on American regional and social dialects and problems associated with dialect learning, a program for learning to record speech sounds in broad phonetic transcription, a program describing some major features of nonstandard dialects, and a component of dialects and dialect learning which includes pro-con arguments on the issue of giving a nonstandard speaker skill in speaking in the standard dialect of the region.

INTENDED USERS AND BENEFICIARIES

Dialects and Dialect Learning is designed for elementary and secondary teachers and may be used with college undergraduates preparing to teach.

The immediate beneficiaries are teachers who will profit from a new or enlarged understanding of the major nonstandard dialects in America.

The ultimate beneficiaries are elementary and secondary students who will be able to profit from individualized instruction in acquiring control of major features of the standard dialect of their region, features that they will be able to use or not use—according to the dictates of given situations.

GOAL(S) OR PURPOSE(S)

The purpose of this self-contained inservice program is to help elementary and secondary teachers develop abilities: (1) to answer questions relating to 10 critical concepts about American dialects, (2) to write broad phonetic transcriptions of tape-recorded speech samples, (3) to categorize and record nonstandard features occurring in the relatively formal speech of children and youth, and (4) to specify and defend their decision regarding whether to teach a standard dialect to nonstandard speakers.

PATTERNS OF USE

Dialects and Dialect Learning is a self-contained package designed for both group study and self-instruction with activities that are sequential and cumulative. (This package is the first in a series of three. The next two are entitled *Learning a Standard English* and *Teaching Writing to Speakers of Nonstandard Dialects*.) The suggested pattern for group-study usage is a series of 10 2-hour sessions at which time participants work together, with intervening self-study. The leader for group study of this program is best described as an instructional manager. This person does not teach in the usual sense of the term, but instead arranges situations so that others may learn as effectively as possible with the materials supplied. The instruction program includes a complete apparatus for self-instruction.

ASSESSMENT PROVISIONS

The general format of the program materials is ASSESS—LEARN—ASSESS Before beginning the program, students take a test. If they obtain the criterion for a unit, they don't have to take the unit work; they can skip the unit and go to the next. Within most of the units, there are frequent "check tests" by which students determine whether they are actually learning the material. At the end of each unit there is also a posttest which will allow students to compare progress from pretest to posttest. Included are evaluation sheets for each unit to be filled out by the student upon completion of that unit. Various tests and evaluation sheets are mailed to the developer or given to the group leader at specified intervals.

TIME REQUIREMENTS

Approximately 20 to 30 hours are required to complete the program, either on a group-study or individual self-instruction basis.

IMPLEMENTATION PROCEDURES

Dialects and Dialect Learning is a self-contained instructional package designed for either self-instruction or group study. It is a companion program to *Learning a Standard English*, an individualized programed course which instructs teachers, K-14, in a classroom management system for individualizing the teaching of standard English to nonstandard speakers. The ultimate objective of the two programs is to prepare teachers to individualize instruction in dialects and usage and to help youngsters acquire control of major features of the standard dialect of their region, features they can use or not use, according to the dictates of situations.

ASSURANCES AND CLAIMS

Assurances

There is no information which suggests that this program is harmful or socially unfair. *Dialects and Dialect Learning* has been prepared with the assistance of consultants, teachers, and children. The program was tested by the developer with the assistance of linguists at the University of Minnesota and the Center for Applied Linguistics in Washington, D.C.

Claims

Prior to instruction, the sample of teachers at three sites involved in the field test of the *Dialects and Dialect Learning* materials tended not to have a knowledge base and were unable to exhibit the requisite skills presented in the program. As a result of the instruction, the teachers made large, significant gains in the amount of knowledge they had acquired and the skills they could exhibit.

With the exception of "About Dialects," the gain scores on the tests were approximately equal to the pretest scores. This indicates that the teachers were able to identify and classify approximately twice as many of the nonstandard speech patterns of children after completing the programed instruction materials as they were able to before receiving instruction. These gains were significant at the .001 level.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Leader's manual	1	Not determined	Consumable every 30 hours	
Audioinstructional package Pretest Program for each unit Tapes	1 per student			

DEVELOPER/AUTHOR:

Upper Midwest Regional Educational Laboratory and
CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

David N. Evans, Executive Director
John Maxwell, Program Coordinator
Karen Hess, Product Developer
Barbara Long, Product Developer
Charles Findley, Product Developer

AVAILABILITY

Dialects and Dialect Learning is complete. It carries a 1971 copyright. A limited edition has been produced and is available from:

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 045

ANALYZING CHILDREN'S BOOKS WITH A CHICANO PERSPECTIVE (PART OF THE FLEXIBLE LEARNING SYSTEM)

*A unit to prepare teachers of Chicano children ages 4-8
to foster the self- and community-concept of the
Chicano child*

This unit is intended to prepare teachers of Chicano children ages 4-8 to analyze and evaluate the texts of children's literature in a way which will enable the teacher to recognize the cultural dimensions of the texts, and to select them for classroom use in a manner which will "minimize derogatory stereotypes" and which will "support, maintain, and develop the young Chicano's self-concept."

The unit assumes on the basis of research that one result from this unit will be that the teachers of young Chicanos will expand their knowledge of the Chicano experience. As a result, they will be more able and more likely to select reading matter for young Chicanos which will expand the children's interest in reading as an activity.

The guide is printed in two sections; it contains an explanation of guidelines, presentation of examples, question-and-answer series, and an ongoing evaluation process in which teachers compare their responses concerning specific examples with the unit's suggested responses. Sections of the unit examine such areas of Chicano-oriented texts as: Generalizations and simplifications, demeaning statements, ethnic stereotypes, inappropriate language, factual error, and misleading information.

SUBJECT AREA(S)

Bicultural teacher training is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers and teaching assistants of Chicano children ages 4-8. The intended beneficiaries are those teachers and their students.

GOAL(S) OR PURPOSE(S)

The goals of this unit are to instruct teachers of young Chicanos on the potential damage to their students of implicitly and/or unintentionally biased texts and to educate those teachers in the analysis of texts for young children in such a way that they can encourage healthy self-concepts and development in their students. The guidelines set down by the authors can be applied to any group of minority children, although the specific examples used by the authors would have to change to relate to the specific ethnic group being taught.

PATTERNS OF USE

The two levels, the dominant sections, of this guide are sequential and cumulative. Within each of the levels, the guide is cumulative but not necessarily sequential.

ASSESSMENT PROVISIONS

Since the guide is structured on the basis of learner activity and involvement and since the authors provide series of questions with their own suggested answers for comparison with those of the learner, there is a self-test progression throughout the guide.

TIME REQUIREMENTS

Time requirements are 6-8 weeks of instruction for teachers, or 8-10 hours; a 2-day training workshop is required of trainers.

ASSURANCES AND CLAIMS

The unit was field tested in the cities of Stockton and Los Angeles, California, with 19 teachers and teaching assistants. Data showed significant knowledge gains with a pretest/posttest design on three of four subtests.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 copy per learner	Not determined	When worn	Not determined

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Oscar Uribe, Jr., Senior Developer
Joseph S. Martinez, Senior Developer

AVAILABILITY

The guide will be available November 1975 from:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 046

SELECTING CHILDREN'S BOOKS WITH A BLACK PERSPECTIVE (PART OF THE FLEXIBLE LEARNING SYSTEM)

A unit to prepare teachers of black children, K-4 to choose texts appropriate to the black experience

This learner's unit is designed for use by teachers and teaching assistants of children from preschool through 3d grade. The unit's particular emphasis, as the title indicates, is to help such teachers learn to analyze books as a means of choosing appropriate materials about the black experience for preschool and early primary children.

The pilosophy behind this unit is that most children's literature used in the early grades does not accurately reflect the black experience in America. The unit holds that the forced exposure of black children to literature that is inadequate and incorrect to their culture encourages a dislike of themselves and a disinterest in, or a dislike for, the formal education process. Finally, the unit suggests that by educating teachers to an understanding of this situation and instructing them in literary analysis with these problems in mind, it will become possible for teachers themselves to understand the importance of judging and selecting books for young children which do include an accurate representation of the black experience.

The unit is constructed in three lessons. The first focuses on illustrations in children's books. The second provides background for analyzing the verbal parts of children's books using a black perspective. The third focuses on analyzing the historical accuracy of both the verbal and the pictorial content of children's books. All three lessons include evaluation forms and instructions, articles, or class projects which relate to the material covered.

SUBJECT AREA(S)

Literary analysis of children's books with a black perspective.

INTENDED USERS AND BENEFICIARIES

The intended users of this learner's unit are teachers and teaching assistants of preschool through 3d-grade children. The intended beneficiaries are these teachers and their students.

GOAL(S) OR PURPOSE(S)

To instruct teachers and teaching assistants on the need to understand children's literature from the point of view of minority children—particularly, in the instance of this unit, Afro-American children—and how to select books for use with their students which will maximize the development of healthy self-concepts in the children.

PATTERNS OF USE

The learner's guide is cumulative and sequential.

ASSESSMENT PROVISIONS

Since this is an activity-oriented unit, there is constant need and opportunity for self-evaluation. Exercises and evaluation forms occur frequently in the unit for this purpose. Since this unit is designed for use with an instructor, evaluation is a part of the instructor's ongoing activity.

TIME REQUIREMENTS

Approximately 42 hours are required.

RD 110 046

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learner's guide	1 per learner	Not determined	Reusable	Not determined

DEVELOPER/AUTHOR:

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1855 Folsom St.
San Francisco, Calif. 94103

Francione N. Lewis, Senior Developer

AVAILABILITY

Field testing is in process and will be completed by November 1975. The distributor has not been determined.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 047

CONTENT ANALYSIS OF TEXTBOOKS FOR BLACK STUDENTS, GRADES 1-3

A self-instructional guide for teachers who wish to identify cultural bias in school materials

Considerable attention has been given in recent years to the presentation of black Americans in textbooks in the Nation's schools. Articles dealing with bias in textbooks are easy to find in the commercial and professional press. Everyone seems to agree that textbooks should give black Americans their share of space and should present black people as an important part of the American heritage and community. However, relatively few published textbooks actually do this. With all the hue and cry, textbooks have not changed much with respect to their treatment of black citizens.

When textbooks are unsatisfactory, it is necessary to supplement them with other materials in order to insure an adequate education for the students who use them. *Content Analysis of Textbooks for Black Students, Grades 1-3*, is a self-instructional course for teachers of the 1st through 3d grades. It is designed to help them to decide whether a given textbook is biased, and to select supplementary materials to remedy the bias, if one is found. The course is the first and only validated research-based technique for analyzing textbooks for black children and identifiying materials to correct textbook deficiencies.

The course begins with teachers viewing the filmstrip (currently a set of slides) with audiotape, in which a narrator gives an overview and rationale for the course and describes the activities contained in the teacher's handbook. Once the filmstrip has been seen, the teacher can complete the rest of the work for the course individually at any convenient place and time. Materials needed for the activities are either supplied by the course coordinator or are readily available.

Content analysis ends with an exercise designed to help teachers test their recollection of the techniques they have learned and the appropriate use of these techniques.

SUBJECT AREA(S)

The subject area is teacher training for analyzing racial bias in textbooks.

This course is organized into four self-instructional lessons. Lesson 1 is concerned with the impact of illustrations in children's books and the corresponding importance of portraying black persons in illustrations. Lesson 2 is concerned with role models as shown in textbook illustrations. The importance of role models, the tendency of children to imitate adults, and the positive and negative aspects of stereotyping are discussed. Lesson 3 is concerned with the accurate presentation of the experience of black people in our country, both currently and historically. Lesson 4 discusses the need for supplementary materials to remedy the deficiencies apparent in most textbooks. It provides lists of books and other materials that can be used at various grade levels and in various curriculum areas.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for teachers of the 1st, 2d, and 3d grades, the course can be used by parents of children in these grade levels and persons preparing to become primary school teachers.

Other potential users are textbook authors and publishers, State textbook selection committees, inservice and preservice teacher training institutions, and curriculum specialists.

The ultimate beneficiaries are the students who will benefit from teachers' increased abilities to analyze and subsequently correct deficiencies found in textbooks.

GOAL(S) OR PURPOSE(S)

The goals of this course are: (1) To increase teachers' awareness of the need to analyze textbooks for black children, (2) to provide teachers with techniques for analyzing textbooks, (3) to identify materials which can be used to correct deficiencies found in textbooks, and (4) to provide teachers with ideas for incorporating supplementary materials in various subject areas.

PATTERNS OF USE

The course is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an inservice or preservice teacher education program and used with social studies programs.

ASSESSMENT PROVISIONS

Checkup exercises are contained in a teacher's handbook. Course coordinators are instructed to collect teacher reaction to the course within 1 week after the course is completed and to have teachers complete a followup questionnaire 1 month after the course. This questionnaire is designed to collect data on whether teachers apply the techniques learned in the course to the textbooks which they use in their classroom.

TIME REQUIREMENTS

The course can be completed in a total of about 15 hours at the rate of 1 hour or more per day as desired.

IMPLEMENTATION PROCEDURES

Although this product is primarily self-instructional, a coordinator is needed to administer the course. The coordinator can be a teacher, principal, district curriculum coordinator, or teacher training specialist. In short, anyone who is interested in insuring that black children get a "fair shake" in the public schools can administer this program.

Personnel Required for Product Adoption and Implementation

A coordinator without special training can implement this unit of instruction. For ease of administration, it is suggested that the coordinator work with teachers in no more than three schools at any given time.

ASSURANCES AND CLAIMS

Assurances

The information gathered from field testing of the materials in local school districts and in five school districts scattered across the Nation indicates that the course is transportable and can be successfully implemented without additional aid beyond that given in the coordinator's and teacher's handbooks. The developer has not received any reports of harm associated with the use of this product.

The materials do not appear to display any form of social bias including ethnic and sexual stereotyping. This assurance is based on an examination of the materials by consultants and on feedback from users.

Claims

The major claims to be made about the course are that:

1. Teachers who take the course will become significantly more aware of the need to analyze textbooks for black children.
2. Teachers who take the course will make significant improvement in their use of the techniques established by the course for analyzing textbooks and in their ability to form the correct conclusion concerning the degree of adequacy of the textbook based on each technique.
3. Teachers strongly support the usefulness of the course.
4. Teachers generalize the course techniques to other educational materials, e.g., films, filmstrips, library books.

These claims are based on the findings of the main and operational field tests. The sample for each of these field tests consisted of primary (grades 1 to 3) schoolteachers from various ethnic backgrounds and from inner-city and suburban classrooms. Approximately 30 teachers participated in the main field test, and nearly 80 participated in the operational field test.

Other important claims which can be made about the product concern aiding the integration process of school districts and careful product development. The former claim is based on reports from educators; the latter is evidenced by the fact that the developer tested and revised the course three times with user feedback incorporated into each revision.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Overview filmstrip	1 per school or district	12.50*	Reusable	
Coordinator's handbook	1 per coordinator	.50*	Consumable each time unit is used	
Teacher's handbook	1 per teacher	2.00*	Consumable each time unit is used	
Bibliography (index cards)	1 per teacher	1.50*	Consumable each time unit is used	
1st-, 2d-, or 3d-grade reader	1 per teacher	2.00	Reusable	Implementer

*Suggested selling price.

DEVELOPER/AUTHOR:

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Henry A. Banks, Project Director

AVAILABILITY

Content Analysis of Textbooks for Black Students exists in prepublication form only; no copies are available for distribution at this time. The Far West Laboratory is currently seeking a publisher to publish and distribute the course package. Copyright is pending.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 048

LEARNING A STANDARD ENGLISH

An individualized programed course for teachers who wish to individualize the teaching of standard English to nonstandard English speakers in grades K-14

Learning a Standard English is a 30- to 40-hour individualized programed course which instructs teachers, K-14, in a classroom management system for individualizing the teaching of a standard English to nonstandard speakers. Numerous speakers of nonstandard dialects often encounter serious difficulties as a result of speaking a nonstandard dialect, most notably in the form of barriers to academic progress, in learning to read, in securing a job, or in achieving desired social status. Thus, schools must provide the opportunity for students to learn to speak standard English if they are not to be denied educational, economic, or social advancement.

Conventional instruction of standard English to nonstandard speakers often ignores nonstandard dialects completely or treats them irrationally (for example, as something to be eradicated). Therefore, the goal of teaching standard English to nonstandard speakers must be augmentation—adding a second dialect to the student's range of skills with every respect accorded the dialect the student brings to the classroom.

Learning a Standard English is designed to provide both preservice and inservice teachers with one proven method of accommodating individual needs in language instruction, in individualizing the language curriculum of students, and in assisting students in gaining oral control of the regionally standard dialect without correcting, replacing, or changing the dialect the student speaks and without implying that the language of the student is incorrect. The course consists of seven printed components: Audiotapes, analysis sheets, pretests/posttests containing the key concepts and skills incorporated within the components, and an information file containing the features most frequently found in nonstandard dialects, their historical source, the major users, the usual context of the feature, and other features which might be integrated into the lessons. *Learning a Standard English* is a self-instruction package, the general format of which is ASSESS—LEARN—ASSESS.

SUBJECT AREA(S)

Seven self-instructional units comprise this programed course in the instruction of teachers in a classroom management system for the individualizing of teaching a standard English to nonstandard speakers. The titles and descriptions of the units are as follow:

Introduction—Reviews basic concepts about dialects, broad phonetic symbols, and features of nonstandard dialects.

Individualization: The basic assumption—Indicates the significance of individualization in the teaching of English as a second dialect.

Eliciting speech streams—Trains teachers in the techniques for securing a representative speech sample.

Creating an individualized usage curriculum—Combines a taped presentation and a programed manual giving teachers procedures for ranking features which occur in student speech and writing a sequenced curriculum for each student.

Selecting, organizing, and banking—Gives teachers criteria and procedures for selecting, indexing, and organizing curriculum materials to meet very specific needs in teaching usage.

Teaching English as a second dialect: Adapting and creating curriculum materials—Provides guidelines for and adapting existing curriculum materials and trains teachers in the skills required in creating new materials, both oral and written.

Classroom procedures or what to do until the computer comes—Contains guidelines for classroom organization related to second-dialect teaching.

A leader's guide—Contains complete instructions for conducting preservice or inservice group sessions.

An individualized guide—Contains complete instructions for proceeding through the course independently.

INTENDED USERS AND BENEFICIARIES

Learning a Standard English is designed for language arts teachers, K-14. Given the autoinstructional nature of the course, it can be used by any language arts teacher.

The ultimate beneficiaries are speakers of nonstandard dialects who will benefit from teachers' increased abilities to individualize the teaching of standard English to nonstandard speakers according to their individual needs.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to teach language arts teachers: (1) To elicit speech samples; (2) to detect, record, and classify nonstandard features of speech; (3) to create from this analysis an individualized usage

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curriculum; and (4) to select, adapt, and create both oral and written usage materials for use within this individualized program.

PATTERNS OF USE

Learning a Standard English is an autoinstructional package with activities that are sequential and cumulative. It is a sequel to *Dialects and Dialect Learning*, which gives teachers background information on the nature of nonstandard dialects, trains them in broad phonetic transcription, teaches them to identify and categorize specific features of nonstandard dialects, and assists them in making curriculum decisions related to usage teaching. For those who have not completed *Dialects and Dialect Learning*, *Learning a Standard English* includes brief programs which provide the essential background skills. A third package, *Teaching Writing to Speakers of Nonstandard Dialects*, completes the series.

ASSESSMENT PROVISIONS

Students take a pretest before beginning the programed instruction. The general format of the program materials is ASSESS—LEARN—ASSESS. Before each unit, the student takes a test. If the student obtains the criterion for the test, there is no need to take the unit work; the student simply skips the unit and goes on the next. At the end of each unit, there is also a posttest which allows pretest/posttest comparisons. Included are evaluation sheets for each unit to be filled out by the student upon completion of that unit. The student also takes a cumulative posttest on the entire program package and fills out a comprehensive evaluation form. Tests and evaluations are mailed or are given to the group leader at specified intervals.

TIME REQUIREMENTS

The course takes approximately 30 working hours to complete.

IMPLEMENTATION PROCEDURES

Learning a Standard English is a completely self-contained, autoinstructional program designed for use by either individuals or groups. The course is the second in a series of courses for preservice and inservice language arts teachers. For individuals who have not completed the first course, *Learning a Standard English* includes brief programs providing the essential background skills.

ASSURANCES AND CLAIMS

Assurances

There is no evidence to suggest that this program may be harmful or socially unfair.

Claims

Since September 1971, the course has been field tested in five locations: Minneapolis public schools, Detroit public schools, Albion College, Simpson College, and Phoenix public schools. The total number of participants in the course was 57.

Based on participant and consultant evaluation of the materials, as well as on a complete analysis of the data from preservice and inservice teachers completing it, the course was found to be effective in instructing teachers to accommodate individual needs in usage instruction, to individualize the usage curriculum of the students, and to assist students in gaining oral control of the regionally standard dialect. With the exception of scores for "About Dialects," "Eliciting Speech Streams," and "Curriculum Sheet," the gain scores were approximately equal to or higher than the pretest scores (in "Curriculum Sheet," the mean score was the maximum score), indicating that, with the exception of these three sections, the participants were able to identify at least twice as many correct answers after they had completed the program. The most significant gain was in "Creating Materials." In this section, the gain was more than eight times greater than the pretest score. In "Entry Skills," the gain was approximately equal to the pretest score, indicating that the participants had acquired a significant amount of information about social dialects. As reflected in the gain scores, the participants nearly tripled their information base in all areas of *Learning a Standard English*.

Prior to field testing, the validity of the course content was assessed by linguists, educators, and programers. Following each field test, the effects of the materials on the participants' acquisition of skill/knowledge were assessed by pretest and posttest, by a careful examination of the participants for each component of the course. Deficiencies in the course were identified, and revisions were made. Final revisions were made in fall 1972.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Self-instruction package (Includes printed, programed course manual, audiotapes, analysis sheets, pretests and posttests, and unit evaluation sheets, has information file on the features of nonstandard dialects, giving their history and major users plus other items to be taught conjunctively)	1 package per student	Not determined	Consumable every 30 hours	

DEVELOPER/AUTHOR;

Upper Midwest Regional Educational Laboratory and CEMREL,Inc.
(Formerly Central Midwestern Regional Educational Laboratory
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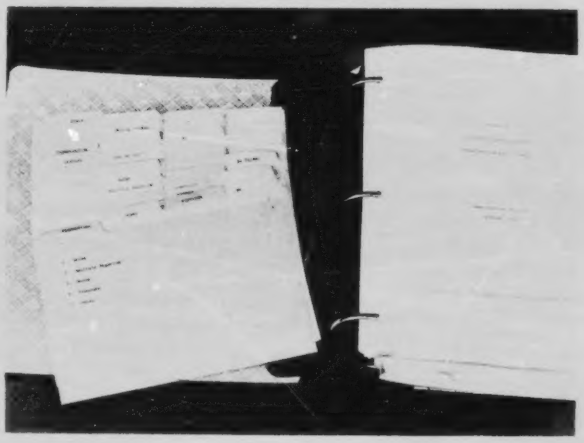
Patricia M. Olson, Product Developer



AVAILABILITY

Learning a Standard English is in finished stage and ready for consideration by a publisher. It carries a 1971 copyright. Multiple copies are not available at this time.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 049

TEACHING A STANDARD ENGLISH TO SPEAKERS OF OTHER DIALECTS

A self-contained, 1-day workshop for English and language arts teachers

Teaching a Standard English to Speakers of Other Dialects is a self-contained, 1-day workshop for language arts and English teachers. The workshop is designed to disseminate up-to-date educationally and linguistically sound information about dialects and dialect learning. The content of the workshop is a development of the project *Teaching a Standard English to Speakers of Nonstandard Dialects*, funded under The U.S. Office of Education's (USOE's) Targeted Communications Program for the purpose of gathering, synthesizing, and disseminating linguistic information as it applies to the teaching of a standard English to speakers of nonstandard dialects. In preparing the workshop, the project staff conducted an extensive review of over 1500 current documents dealing with dialects and dialect instruction. A synthesis of the most relevant information is contained in the *Basic Report*. The workshop itself consists of viewing media and discussing questions pertinent to the teachers' local situation and includes printed materials, five color-sound filmstrips, study questions, and a leader's manual.

Teaching a Standard English to Speakers of Other Dialects involves several basic problems. Misconceptions about dialects, about standard and nonstandard English, and about methods and materials for use in language learning are widespread in both the schools and society. Many textbooks and many colleges and universities do not provide prospective teachers with an adequate background on dialects and dialect learning simply because they too often treat language as "right" or "wrong," rather than "appropriate" or "inappropriate," depending on the context in which it is used. Consequently, teachers often consider the nonstandard speaker's language to be deficient and the speaker to be lazy or ignorant. Attempts to "correct" a nonstandard speaker's language may alienate the student from the teacher and also block the student's motivation to learn a standard dialect. The total damage to nonstandard speakers caused by this lack of current information related to dialects may be profound. These misconceptions should be dispelled and replaced by educationally and linguistically sound information about language and language learning—specifically about teaching a standard English to speakers of other dialects—which should help to overcome the questionable and often damaging attitudes and practices which characterize current approaches to English usage.

SUBJECT AREA(S)

Targeted communications are reports aimed at specified audiences which will interpret and synthesize for these audiences the existing research and related information about dialects. A summary of the materials reviewed in the *Basic Report* is as follows:

General Descriptive Studies and Reports on American Dialects—What is Known (92 pages)
Issues in Dialect Study (52 pages)
Implementation in the Classroom (101 pages)
Teacher Preparation (40 pages)
Bibliographies (412 pages)
Appendix A (2 pages)
Appendix B (14 pages).

INTENDED USERS AND BENEFICIARIES

This project was designed for audiences involved in teaching a standard English to speakers of other dialects, specifically teachers, administrators, and textbook publishers.

The ultimate beneficiaries of this project are speakers of nonstandard dialects whose linguistic capabilities and needs will be furthered or met through elimination of questionable and often damaging attitudes and practices characteristic of current approaches to English usage both in teaching and textbooks.

GOAL(S) OR PURPOSE(S)

Teaching a Standard English to Speakers of Other Dialects is designed to alleviate questionable and often damaging instruction in English usage by providing educationally and linguistically sound materials for those audiences directly and indirectly involved in the task of teaching English to speakers of other dialects; and to interpret and synthesize existing research and related information in a scientifically respectable way, taking into account the constraints under which those audiences and their institutions must operate. Materials are aimed specifically at teachers, school boards, administrators, college methods teachers, and textbook publishers and editors.

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PATTERNS OF USE

The workshop is planned to fill an entire day, but it could be shortened to meet local needs. Any modification of the workshop plan is entirely open to the workshop leader. The individuals comprising the workshop audience (teacher training institutions, teachers, administrators, supervisors, school boards, and textbook publishers) generally have limited time available for reading and synthesizing interpretative material, and likely little prior knowledge about dialects. Accordingly, a synthesis of the most relevant information is contained in the *Basic Report*. Because the targeted audiences were varied and consequently required different information, the products in this workshop were designed for use individually or as a total package, depending upon the specific situation.

ASSESSMENT PROVISIONS

Because this is primarily a dissemination project, no assessment provisions are included in the workshop materials. During the workshop, participants are asked to discuss study questions or suggest additional questions or topics for discussion, both of which often relate directly to the individual's own instructional situation.

TIME REQUIREMENTS

Although the workshop is planned to fill an entire day, it could be shortened to meet local needs. In its complete form, the workshop requires approximately 7 hours for execution.

IMPLEMENTATION PROCEDURES

The workshop format requires the presence of a leader who will supervise activities and present materials. The *Basic Report* may be of help to the leader in preparing for the discussions to be held during the workshop. The workshop materials may be used on an individual basis as well.

ASSURANCES AND CLAIMS

During the development of each product, representatives from each targeted audience were consulted to assure the relevance and effectiveness of the products being developed. Each product was evaluated first by educators and linguists to verify the linguistic and methodological soundness. This was followed with a review by representatives from the targeted audiences to assure that the language was appropriate, that the content was relevant and significant, and that the most appropriate media for dissemination had been selected. Specifically, the products were evaluated using six criteria: Content, format, interest, effectiveness, usefulness, and time required. The developmental evaluation led to several modifications and revisions of the products.

The annotations used in the bibliography were sent to the individual authors of the references cited for their approvals and were modified to incorporate their additions and suggestions.

The completed products were evaluated by a panel of critics from all levels of education who responded very favorably to the printed material and the media. The comments have been summarized and are available in the technical backup report.

There is no information which suggests that this project may be harmful or socially unfair.

DEVELOPER/AUTHOR:

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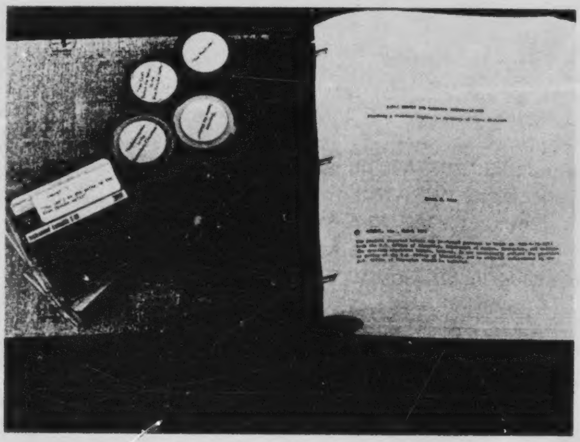
Barbara Long, Product Developer
Patricia Olson, Product Developer
Michael Linn, Product Developer
Barbara Thorton, Product Developer
Betty Wallace Robinett, Consultant
Harold B. Allen, Consultant
John C. Maxwell, Consultant

AVAILABILITY

Teaching a Standard English to Speakers of Nonstandard Dialects **is complete. The project carries a 1972 copyright. Multiple copies are not available at this time.**



INFORMATION CURRENT AS OF MARCH 1975. ■

TEACHING WRITING TO SPEAKERS OF NONSTANDARD DIALECTS

An inservice or preservice course containing programs in a variety of self-correction and self-pacing formats

Teaching Writing to Speakers of Nonstandard Dialects is an inservice or preservice course containing programs in a variety of formats allowing self-correction and self-pacing. The course provides teachers with background information on the nature of nonstandard dialects in speech and writing, as well as instruction and practice in using this information in individualizing their teaching of writing to speakers of nonstandard dialects.

Competency in written communication is a skill often critical to both academic and vocational success. But the teacher must be concerned with more than the student's writing; speech must also be considered. Speakers of a nonstandard dialect may find direct interference from their dialects in their writing. Thus, the teacher must first understand the nature of the nonstandard dialect involved and then recognize specific nonstandard features which may be causing interference with composition.

The writing program taught in the course is characterized by: Students who work toward individualized objectives, independently and in peer groups, discussing writing objectives, editing each other's papers, and serving as audiences for writing; teachers who understand and respect nonstandard spoken and written dialects, who individualize curriculums for students, who evaluate each piece of writing against a limited and prespecified set of objectives, both during and after writing, and who are consultants, tutors, models, and final readers; a curriculum which is individualized to meet each student's needs in usage, mechanics, and the communicative qualities of writing; and a classroom which is flexible and provides a positive, responsive environment for writing, including stimulus materials, tape recorders, and student exercises on specific nonstandard features.

SUBJECT AREA(S)

Teaching Writing to Speakers of Nonstandard Dialects consists of 10 written units. The titles and page lengths of the units are as follows:

I. The Nature of Nonstandard Dialects (13 pages)
II. Analyzing Nonstandard Writing (49 pages)
III. Detecting Interference (27 pages)
IV. Diagnosis and Prescription (45 pages)
V. Evaluation of Writing (15 pages)
VI. The Units (13 pages)
VII. Peer Groups (20 pages)
VIII. Instructional Strategies (30 pages)
IX. Practicum I (10 pages)
X. Practicum II (50 pages)

INTENDED USERS AND BENEFICIARIES

This instructional package is designed as an inservice or preservice course for use by junior high school, by inner-city teachers, or in English methods courses. However, the individualized approach to teaching composition courses systematically using performance-based objectives is also relevant for inner-city senior high school teachers as well as for teachers of grades 7-12 in suburban schools.

The immediate beneficiaries are junior high school English teachers who learn to understand and respect nonstandard spoken and written dialects and who are then trained to individualize the teaching of writing to speakers of nonstandard dialects.

The ultimate beneficiaries are speakers of nonstandard dialects, students who gain competency in written communication without direct interference from their nonstandard dialects.

GOAL(S) OR PURPOSE(S)

The objectives of this instructional package are: (1) To provide teachers with background information on the nature of nonstandard dialects in speech and writing, and (2) to provide teachers with instruction and practice in individualizing the teaching of writing.

Specifically, teachers learn: (1) To secure representative samples of students' speech and writing; (2) to analyze those pieces of writing for problems to be included in each student's curriculum; (3) to determine from analyses of speech which of the writing problems derive from nonstandard speech patterns; (4) to use information from the analyses to create an individualized, sequenced writing curriculum for each student; and (5) to implement and maintain an individualized program.

PATTERNS OF USE

Teaching Writing to Speakers of Nonstandard Dialects is a self-instructional package with activities that are sequential and cumulative. It is a sequel to *Dialects and Dialect Learning* and *Learning a Standard English*, courses which instruct teachers, grades K-12, in the use of a classroom management system by which the teaching of standard English to nonstandard speakers can be individualized.

ASSESSMENT PROVISIONS

The general format of the program materials is one of ASSESS—LEARN—ASSESS. Within most of the units, there are frequent "check tests" whereby students can determine whether they are actually learning the material. At the end of each unit, there is also a posttest which allows students to compare their program from pretest to posttest.

TIME REQUIREMENTS

The course takes approximately 30-40 hours to complete.

IMPLEMENTATION PROCEDURES

Teaching Writing to Speakers of Nonstandard Dialects is the third in a series of courses for preservice or inservice language arts teachers.

The first course, *Dialects and Dialect Learning*, provides teachers with background information on the nature of nonstandard dialects, instructs them in broad phonetic transcription, teaches them to identify and categorize specific features of nonstandard dialects, and assists them in making curriculum decisions related to language instruction. The second course, *Learning a Standard English*, instructs teachers, grades K-12, in the use of a classroom management system by which the teaching of standard English to nonstandard speakers can be individualized. After completing the course, teachers are able to elicit speech samples; to detect, record, and classify nonstandard features of speech; to create from this analysis individualized usage curriculums; and to select, adapt, and create both oral and written usage materials for use with the individualized program.

ASSURANCES AND CLAIMS

Assurances

There is no evidence which suggests that this program may be harmful or socially unfair.

Claims

Based upon the success of participants at multiple test sites, as well as upon the enthusiastic response of participants and leaders, *Teaching Writing to Speakers of Nonstandard Dialects* should provide both preservice and inservice teachers with one proven method of accommodating individuals' needs in language instruction by individualizing the language curriculum of the students and by assisting students in gaining written control of the standard dialect without correcting, changing, or replacing the dialect which the student speaks and without implying that the language of the student is incorrect. Given an accepting attitude toward language and a tested classroom management system for individualizing language instruction, the teacher should be better prepared to help students strive toward productive competence in a standard English, a necessary skill for all students.

The formative evaluation of the model, conducted in four English classrooms in an inner-city junior high school, provided data to support the effectiveness of the model: Pretest/posttest comparisons revealed an average gain of 8 percent following 10 weeks of writing instruction. The summative evaluation of the model, conducted in one experimental and one control class in an inner-city junior high school, provided further data to support the effectiveness of the model and revealed positive student response toward the course.

The formative evaluation of the materials, tested in classrooms in the Minneapolis Public Schools, yielded information on which modification of the exercises was made. Lack of sufficient time and moneys precluded summative evaluation on most of the materials. However, a summative evaluation of the student program revealed a mean growth from pretest-to-posttest of 41 percent. Most students evaluated the program as relevant and interesting.

The formative evaluation of the course successfully identified points of weaknesses within the individual components which led to revisions and modifications. The formative evaluation was conducted at a 1-week workshop for inservice junior high teachers, in an English methods course at a State university, and at a college in Iowa as part of an interim course in methods of teaching English. Growth scores indicated that the components led to an effective change in skill/knowledge of the participants.

The summative evaluation of the course was conducted at five sites. Comparison of pretest-to-posttest scores of the participants indicated that the course was effective in teaching the skills and information specified in the program objectives. Although not all participants met the criteria for each component, all participants did show a gain from the pretest to posttest on each component of the course, with an average gain range of 19 to 50 over the mean percent for pretest scores.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Personal data sheet	1 package per student	Not yet determined	Consumable every 30-40 hours	
Pretest				
Manual for each unit				
Tape				
Set of cards				
Supplmentary materials:				
Leader's manual				
Individualized guide				
Your part in the writing program (Aides)				
Nonstandard writing exercises				
Training program for students				

DEVELOPER/AUTHOR:

Upper Midwest Regional Educational Laboratory

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

Karen M. Hess, Project Director
Barbara K. Long, Principal Investigator
Patricia M. Olson, Product Developer
Barbara L. Thorton, Product Developer

AVAILABILITY

Teaching Writing to Speakers of Nonstandard Dialects is completed and is ready for consideration by a publisher. It carries a 1972 copyright. Multiple copies are not available at this time.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 051

ENGLISH AS A SECOND LANGUAGE PACKAGE

A product designed to aid the teacher to relate the instruction to the specific needs of the students

The *English as a Second Language Package* is designed so that the teacher can relate the instruction to the student's specific needs. Emphasized is the audiolingual approach—listening and repeating—since this most closely approximates the way one's own language is learned.

Materials demonstrate effective, validated methods and techniques of audiolingual instruction for the teacher to practice. Not only is an instructional cycle outlined to show necessary steps to program development, but instruction is also offered in developing lesson plans.

Audiolingual techniques included in the package incorporate substitution drills, conversion drills, and addition drills as well as pronunciation tests, picture tests for listening comprehension, grammar tests, and comprehension and reading tests.

The package includes a presentation in a dialect from India which utilizes the shock language approach by offering experience with a foreign language. The presentation is intended to apprise instructors of the difficulties encountered in the classroom by the non-English-speaking adult.

Another package component is a 15-minute color film which demonstrates the audiolingual approach. It includes vocabulary, controlled dialog, sounds, and sentence patterns in an actual classroom situation. A teacher's workbook augments the package.

SUBJECT AREA(S)

Teacher training in teaching English as a second language is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended product users are language teachers at any level, elementary and secondary teachers, and school administrators. The ultimate intended beneficiaries are Spanish-speaking children and non-English-speaking adults.

GOAL(S) OR PURPOSE(S)

The intended purposes are: (1) To demonstrate to participants the audiolingual approach to teaching language; (2) to show participants the components of an audiolingual program; (3) to convince participants of the effectiveness of the audiolingual teaching method; (4) to motivate participants to adapt the audiolingual method to their own teaching; and (5) to persuade participants to accept the philosophy, and to apply the techniques and processes, of the audiolingual teaching approach.

PATTERNS OF USE

The package is designed so the teacher can relate the instruction to the specific student needs. Emphasized is the audiolingual approach—listening and repeating—since this most closely approximates the way one's native language is learned.

Special emphasis is placed on the correct use and application of the audiolingual approach which moves the adult speaker from the reproduction of English sounds to controlled conversation in four steps.

ASSESSMENT PROVISIONS

The measurement of achievement is determined as follows: (1) By observed feedback indicating involvement by participants, a knowledge of the components and their relations as revealed in the posttest, and an expressed intent of utilization of the learnings acquired as indicated in an open-ended evaluation in the posttest; (2) by feedback obtained in the posttest indicating a knowledge of the components of the package and expression of the intended utilization of the learnings acquired; and (3) by a longitudinal survey of participant techniques, methods, and content made 6 months after the presentation.

TIME REQUIREMENTS

Four hours of learner time is required.

IMPLEMENTATION PROCEDURES

This product is not consumable and may be reused extensively. It involves use of media components; e.g., slide/tape presentations, a 16mm color film, and workbooks.

The product is complete for use without developers. Training by a (Southwestern Cooperative Educational Laboratory) staff member on a consultant basis is readily available and may be purchased, but it is not a requirement for product implementation.

Use of this self-contained product involves no preexisting consumer restraints, organizational changes, or additional resources. Consumer maintenance involves only protection and normal care of the component materials. Community reactions have been regularly positive, and the product operates equally well with all envisioned user groups.

Personnel Required for Product Adoption and Implementation

Training is available from SWCEL (but not mandatory), as noted, for the local administrators wishing to use the package for instruction of adult education teachers in their schools. Costs for the product adopted will be dependent upon various factors; e.g., the local expense involved in a 4-hour teaching session which can be performed by one staff member and concomitant released time for teachers. All necessary equipment is included or easily available in any school.

ASSURANCES AND CLAIMS

Several features of this product are unusual and encountered rarely, if ever, in the various educational interventions which attempt to reach the ultimate target group—the non-English-speaking adult. A particular approach, audiolingual techniques, is utilized and presented in such a fashion that the teacher can relate it to specific student needs. The teacher is also offered instruction in lesson plan development.

The design of the presentation of techniques and a comprehensive approach to using them for the adult-education teacher who directs efforts toward teaching the undereducated Spanish-speaking adult is unique in itself.

Since this product is directed toward the linguistic concerns of a minority segment of the population, both male and female, those who were involved in the planning and production of the series included representatives of the ultimate target minority beneficiaries. This group also included religious representatives.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Package of slide/tapes, workbooks, and 16mm color film	1 package for 30 participants	270.00; 2.00 for replacement of workbooks	Reusable. Workbooks are consumable	

DEVELOPER/AUTHOR:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

AVAILABILITY

The *English as a Second Language Package* is available from the distributor. Copyright is pending. Order from:

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman NE.
Albuquerque, N. Mex. 87108

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 052

THINKING AND REASONING GAMES (PART OF THE THINKING AND REASONING PROGRAM)

Three teacher-training units which enable teachers to act as effective facilitators for children in an independent, game-oriented learning environment

Thinking and Reasoning Games provides teacher training which enables teachers to act as effective facilitators for kindergarten and 1st-grade children working in an independent learning center. The emphasis is on process teaching and the value of using games as learning tools. Three major units—An Overview of the Game Center, Management Skills, and Use of Games in the Center—make up the product.

Through game playing, children can develop or strengthen independent work skills, personality skills, and analytic thinking skills. Piaget (1962) and Reilly (1974) postulate that interindividual relationships, as well as reflective thinking and other analytic thinking skills, are developed through play. The importance of the staff development package is that it provides information which enables the teacher to value games as learning tools and provides the teacher with skills needed to allow the children to play independently.

The primary role of the teacher during the 1-hour-a-day program is that of a facilitator. The teacher sets up the materials so that the children can work independently, introduces and teaches games with rules, and uses observation and reinforcement skills to assess the children's growth. Suggested methods for working with children who are having problems developing certain personality traits or work skills are provided. It is most important in this program that the teacher be able to step back and allow the children to develop at their own rates and in their own ways.

The package has taken a multimedia approach using video tapes, activities, and printed materials to express ideas. A trainer's manual and a teacher's manual are provided. The trainer's manual provides suggestions for activities to guide the teachers and to reinforce the ideas presented through the teacher's manual.

SUBJECT AREA(S)

Three major units comprise the teacher training package: Overview of the games program, management skills and teaching, and using games in the classroom. The overview of the program includes a video tape and a paper which describes the roles of the children and the teacher and the skills developed through play with games. The management section provides skill training in setting up the classroom, in identifying and reinforcing appropriate behaviors for the independent work center, in diagnosing a child's growth in skills and helping a child when problems develop, and in developing observation skills. The third section concentrates on providing teachers with the information and experience that will allow them to value games as learning tools. Teachers analyze games in order to identify skills required. They play the games and practice teaching them using certain teaching strategies. Guidelines on how to select games and a list of previously tested games are included.

INTENDED USERS AND BENEFICIARIES

Thinking and Reasoning Games is designed for elementary schoolteachers who work with multicultural kindergarten and 1st-grade children. Ultimately, the benefit should be for the children themselves, as they will be able to learn independent work skills and to develop other skills at their own pace in an informal learning environment.

GOAL(S) OR PURPOSE(S)

The major goals of the program are to train teachers to use skills which encourage children to work independently and to provide teachers with knowledge and experience which allow them to value and use games as learning tools.

PATTERNS OF USE

The package has been designed so that the major units can be presented in any order, thus providing a meaningful experience for the teacher.

The package supplements any curriculum that uses games as a way of learning. It was specifically designed to supplement a problem-solving program.

ASSESSMENT PROVISIONS

Although the effectiveness of the product is evaluated by the developers (see "Claims" section), no formal test instruments are included in the package. Student evaluation is considered to be an ongoing part of the teacher's activities.

TIME REQUIREMENTS

The teacher training is designed to take approximately 8 hours. The program, once implemented in the school, would be 1 hour, 3 to 5 days a week.

IMPLEMENTATION PROCEDURES

A trainer's manual is provided so that supervising teachers can conduct the workshop with teachers in their district. Training will be provided for the trainers through SEDL.

Special User Considerations

The use of games as learning tools is actually an ancient custom. However, teachers may find that parents visiting the school may not understand the allotment of 1 hour of time for play with games. SEDL has produced a brief pamphlet especially for use with parents. It lists concisely the benefits children gain from play with games.

ASSURANCES AND CLAIMS

Assurances

Thinking and Reasoning Games has been pilot tested with approximately 36 children during the 1973-74 and 1974-75 school years. Field test is scheduled for fall 1975.

To date, no social, ethnic, or sex stereotyping bias has been noted. Printed materials contain the generic "he/she." Pilot test classrooms have been multiethnic and represented both sexes. Teachers have represented three major ethnic groups; i.e., Mexican American, Anglo American, and black American. Games used in the product have also been reviewed by the multiethnic program staff for possible bias. No reports of harmfulness have been received from users, developers, or observers.

Whether the games package can stand alone as a separate product will be assessed by November 30, 1975.

Claims

Pilot test data are currently being collected and are, therefore, incomplete. The 1974-75 school year is the first year that a systematic evaluation has been designed for the product. Specific claims will be forthcoming based on pilot test and field test. However, the variables of interest regarding claims are reviewed here.

The product is going through the systematic development process which all SEDL products undergo. Following a needs assessment (context evaluation), a design test is made of the initial product design. Following refinements from design test trial, the product is pilot tested, utilizing formative evaluation techniques for further refinement guidelines. Following pilot testing and subsequent revisions, the product is field tested on a wide-scale basis. Summative and comparative evaluation information is gathered at that time prior to marketing.

The current pilot test evaluation design includes three strategies:

1. Observations from product developers are being systematically collected via instruments developed by the evaluation staff to respond to questions of effectiveness of games as a strategy for learning. Over 100 observations will have been made during the 1974-75 school year.

2. A games analysis has been performed in terms of Meeker's Adaptation of the Structure of Intellect Model. Based on the identification of the cognitive operations involved with games learning, a posttest covering these operations will be administered to both project and comparison groups. Results of a general achievement test administered by the school at the beginning of the year will be used as a covariable in analyses.

3. The product is scheduled to be critiqued by a games specialist external to the laboratory. A critique will also be made by a consultant external to SEDL prior to final dissemination.

RD 110 052

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Trainer's manual with 2 video tapes, 1 audiotape, 1 slide show, and printed materials	1 per trainer (20 teachers)	Material under development and not available	Reusable	
Teacher's manual with printed material	1 per teacher		Consumable each time unit is used	
Extra materials (felt figures), bulletin boards	1 per teacher		Reusable	
Games used in the program	1 for 3 teachers		Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Murray A. Newman, Project Coordinator

AVAILABILITY

The product exists in prepublication form only; no copies are available for distribution at this time.

Materials will probably be revised in summer 1975; this product will be completed November 1975; and publication of the materials will begin in December 1975. The distributor is:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 053

THE GAME CENTER (PART OF THE THINKING AND REASONING PROGRAM)

A color film to encourage children in grades K-2 to cooperate in a game-learning environment

The Game Center is available as a 10-minute, color, 3/4-inch video tape or as a 16mm film. It was developed to motivate and interest kindergarten to 2d-grade children in learning and using behaviors/rules cooperatively in an independent games learning center. It emphasizes the theme of cooperation while focusing on four behaviors for children to use in an independent learning center. Each of three characters in the video tape represents a particular behavior/rule which would increase the effectiveness of an independent learning center: (1) Pickupit—picking up and putting away the games, (2) Leggy—walking carefully around others' work, and (3) the Thuzzies—talking quietly. Messmaker, a fourth character, continually messes up the center. All of the characters learn from two children how to cooperate so that they all have time to play with the games instead of limiting themselves to one behavior.

Posters with pictures of the fantasy characters are included for the teachers to use in discussing the rules and to interest the children in following the rules. The teacher's manual with instructions for the effective use of the video tape and posters includes: (1) Questions and discussion guidelines for the teacher to use in helping the children identify the behaviors/rules for the game center and (2) methods for teaching the behaviors/rules to the children.

The video tape is designed as a management tool for teachers. It should help teachers become aware of their expectations for children by helping them identify these expectations in concrete terms. It may function to limit the number of rules imposed upon children.

The teacher introduces the children to the game center, demonstrates the materials available for the chidren to use, shows the video tape, discusses—using the poster as support—the video tape, and establishes with the children the rules in behavioral terms for the center.

SUBJECT AREA(S)

The video tape is designed to be used as a management tool for teachers as they introduce children to an independent learning center where it is essential that the children cooperate and share responsibility.

INTENDED USERS AND BENEFICIARIES

The video tape is designed to be used by kindergarten and 1st-grade teachers who work with multiethnic children.

The developers believe the video tape may be successfully used with students in the 2d- and 3d-grade also. Although the video tape was designed to accompany the Thinking and Reasoning Game Center package, it can supplement effectively any other game center such as a mathematics or reading game center.

GOAL(S) OR PURPOSE(S)

The teachers will use the video tape: (1) To introduce and teach in a positive manner rules/behaviors for an independent learning center using games, (2) to motivate children to work cooperatively with each other and to follow the rules established in the game center, and (3) to identify in concrete behavioral terms their expectations for children in the game center.

PATTERNS OF USE

Units can be used in any order. The package can be used as a supplement to the Thinking and Reasoning Program or with any other program which includes an independent learning center focusing on the use of games as learning tools.

ASSESSMENT PROVISIONS

No formal testing procedures are included with the product.

TIME REQUIREMENTS

The developers suggest that 20 minutes of interaction between the teacher and the children follow the 10-minute video tape. They also recommend that the teacher spend approximately 5 minutes at the beginning of each game center period to review the behaviors expected and periodically observe and reinforce the use of the behaviors during the period. Because of the high interest children display while viewing the video tape, it could be shown a second or third time as reinforcement after Christmas and Easter holidays.

IMPLEMENTATION PROCEDURES

A 16mm film projector or a 3/4-inch, color video player and monitor are needed. The product is designed to be used to complement other programs already being used in the classroom.

ASSURANCES AND CLAIMS

No social bias has been brought to the attention of the multiethnic program staff. Care was taken to include multiethnic representation and a balance of nonstereotypic sex roles in the film.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
The Game Center, a video tape or film	1 per school or district	Material under development, not yet available	Reusable	
The game center poster	1 per classroom or game center		Reusable	
Teacher's manual	1 per school or classroom		Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Murray A. Newman, Project Coordinator

AVAILABILITY

The product is undergoing pilot test. It will be field tested and completed by November 1975, and should be available by December 1975.

INFORMATION CURRENT AS OF MARCH 1975 ■

PREPARING TEACHERS FOR MEXICAN AMERICAN CHILDREN

A document to help teachers understand the learning problems of Mexican-American children

The school is presently the primary social institution directed by the community to assume a major role in taking steps to improve the Mexican-Americans' status. The school has three possible avenues for action in correcting low school and societal achievement: (1) To change the child, (2) to change the school, or (3) to change the social systems. Responsibility for such changes is passed on to the teachers. However, the teachers' failure to understand the interrelationships between culture, society, personality, and behavior often impedes this change. Thus, teacher improvement, in addition to other institutional changes, can contribute to raised Mexican-American group status. Changes must occur in present teacher-preparation programs, in teachers, and in schools. Cooperation between schools and teacher-preparation institutions can produce changes which will ultimately trickle down to the real clients—the children.

SUBJECT AREA(S)

This document deals with how teachers can be prepared to teach Mexican-American children in a way which will ultimately improve the Mexican-Americans' status.

INTENDED USERS AND BENEFICIARIES

The intended users are teacher educators involved in preparing teachers for minority-group children.

GOAL(S) OR PURPOSE(S)

The goal is to present ways for preparing teachers of Mexican-American children so that they may aid in improving the status of Mexican Americans.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Las Cruces, N. Mex. 88001

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Thomas P. Carter

AVAILABILITY

Order No. ED 025 367, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 110 055

PRACTICE-CENTERED TEACHER TRAINING: STANDARD ENGLISH FOR SPEAKERS OF NONSTANDARD DIALECTS

A manual for training teachers of standard English to understand speakers of nonstandard dialects

Practice-Centered Teacher Training: Standard English for Speakers of Nonstandard Dialects is a syllabus or manual for the training of teachers of standard English to adapt to speakers of nonstandard dialects. It is based on the proposition that important elements of foreign-language teaching methodology are applicable to teaching standard English as a second dialect and that this methodology can be taught effectively if applied linguistics and methodology are closely integrated and lead to immediate practical applications.

SUBJECT AREA(S)

Part I: Applied linguistics (70 pages) covers phonology, morphology, and syntax of standard English and identifies variations found in nonstandard black English and English reflecting a Spanish influence.

Part II: Teaching procedures (51 pages) covers management of audio lingual activities, presentation of basic materials, oral teaching of structure, teaching of structure through reading, teaching of pronunciation, teaching of sound/letter correspondence (spelling), teaching of reading, using visual aids, and using electronic equipment (language laboratory).

Part III: Microlessons (26 pages) provides 15 short lessons covering examples from phonology, morphology, and grammar. For each microlesson, learning goals, linguistic basis, and suggested teaching behaviors are specified.

INTENDED USERS AND BENEFICIARIES

The primary users of this manual are practicing teachers or teachers in training who will be teaching students whose native speech is Spanish or nonstandard English. The ultimate beneficiaries are students who wish to learn standard English to use in situations where it is appropriate.

GOAL(S) OR PURPOSE(S)

The goal is to provide teachers with an introduction to common patterns of nonstandard English and a guide to methods of helping children master comparable patterns of standard English. The intent of such teaching is not to change the student's native dialect or to replace it by the standard, but rather to make the standard dialect available to the student.

PATTERNS OF USE

This volume can be used in preservice classes or inservice training of teachers. It can also provide a self-help instrument for teachers not undergoing formal training. In conventional courses, the text can be used in one- or two-semester or quarter courses. Its length makes it suitable also for intensive summer workshops.

ASSESSMENT PROVISIONS

No formal assessment devices are provided. The best test of the effectiveness of this material will be found in the behavior of the pupils whose teachers use and apply it.

TIME REQUIREMENTS

See "Patterns of Use."

IMPLEMENTATION PROCEDURES

The volume is self-contained. Where video tape facilities are available, teachers can use the microlessons to practice microteaching, with or without a master teacher, and to analyze their performance. Suggestions for the use of these materials in a language laboratory are provided in the text.

ASSURANCES AND CLAIMS

Portions of the manuscript were field tested with various groups during development. No evidence of negative effects or social bias has appeared during these tests or in subsequent use.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Practice-Centered Teacher Training: Standard English for Speakers of Nonstandard Dialects (text)	1 per teacher	4.60	Reusable	

DEVELOPER/AUTHOR:

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

Diana E. Bartley
Robert L. Politzer

AVAILABILITY

Practice-Centered Teacher Training: Standard English for Speakers of Nonstandard Dialects is available from:

Rand McNally & Co.
Box 7600
Chicago, Ill. 60680

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 110 056

MULTIMEDIA TRAINING PACKAGE FOR SPANISH-SPEAKING PARAPROFESSIONAL TEACHERS: "EL ARREGLO DE LA SALA DE CLASE PARA BUEN COMPORTAMIENTO"

A multimedia training package for Spanish-speaking, low-income paraprofessional teachers of preschool children

El arreglo de la sala de clase para buen comportamiento is a multimedia training package for Spanish-speaking, low-income paraprofessional teachers of preschool children, particularly those who have little or no formal training. Designed for a leader, an observer, and 15 participants, the package requires 5 sessions of approximately 1-1/2 hours each.

The package includes: (1) A leader's manual; (2) detailed session procedures; and (3) a variety of media products – video tapes, filmstrips, films, transparencies, and take-home pamphlets. All aural materials are in Spanish; printed materials are in Spanish and English. Each session procedure is designed with an introduction, a straightforward presentation of concepts, group participation activities, and a summary.

The leader's manual includes specific instructions on techniques of group leadership, directions for increasing participation through a variety of techniques (such as role playing, simulation, and group discussion), and an overview of the training sessions.

The sessions present basic principles of classroom arrangement and maintenance which will help reduce children's behavior problems. Participants learn how to adapt furniture to meet the needs of young children, how to display materials, and how to arrange space for classroom activities in ways that will promote children's independence while encouraging good classroom behavior.

Each session procedure includes detailed information on how to present the particular concepts included. Following a statement of the purposes and focus of the session, the format is as follows: Introduction, review (if appropriate), overview of media presentation, presentation, discussion, group participation activities, summary, and evaluation. Sample dialog is included when appropriate.

Media includes two video tapes or films, filmstrips and audiotapes, a set of transparencies, game cards, pictures, and pamphlets for participants.

A 4-month context analysis study in January 1973 included interviews with nationally recognized experts, a literature search, conferences with representatives of regional and State agencies, and interviews with teacher trainers. Results indicated that although there are many early childhood curriculum programs and materials, the majority are designed for children rather than for adults who interact with children. Further, few materials are available for training the paraprofessional or assistant teacher who has no college degree. The need for alternative presentation modes utilizing modern media technology and placing minimal reliance upon printed material was also identified.

Few, if any, materials are organized in modular form or discrete packages which can be presented independently. Few are presented in multimedia format so that the adult learner with minimal reading skills can succeed. Few are presented in Spanish.

The instructional principles followed are to develop awareness, knowledge, or comprehension and then to apply them. A variety of teaching strategies is described in the leader's manual and also is built into each session procedure. Strategies include large- and small-group discussions, simulation activities, role play, problem-solving situations, games, and evaluation, as well as direct presentation of information.

Role of implementer. The group leader secures a meeting room and necessary equipment, operates audiovisual equipment, leads the sessions, and distributes and collects evaluation forms.

Participants watch media presentations and participate in large- and small-group discussions, role play, and problem-solving activities. Take-home pamphlets which reinforce concepts presented in the sessions are provided.

SUBJECT AREA(S)

This module includes the following subject areas: (1) How inapporpriate arrangement and maintenance frequently result in behavior problems, (2) how children feel when the classroom environment is inappropriate, (3) how to change or adapt existing facilities to meet the needs of children, and (4) how to select and display classroom materials.

INTENDED USERS AND BENEFICIARIES

The intended users of this module are Spanish-speaking low-income paraprofessional teachers of young children who have had limited formal training in preschool education.

GOAL(S) OR PURPOSE(S)

The participant will: (1) Recognize the relation between room arrangement and management and classroom behavior problems; (2) recognize physical settings that do and do not meet the needs of children; (3) know which factors to consider in arranging space for various kinds of activities; (4) know how to select, display, and determine the quantity of manipulative materials to minimize behavior problems; and (5) understand the teacher's role in establishing rules for use of classroom materials.

PATTERNS OF USE

Sessions are sequential and cumulative. They may be used as part of inservice or preservice training programs.

ASSESSMENT PROVISIONS

Tests of participant knowledge of module content are provided for use at the beginning of the study and following completion of the package. In addition, criterion-referenced tests of content for each session are provided.

TIME REQUIREMENTS

The package consists of five sessions, each requiring a period of approximately 1-1/2 hours.

IMPLEMENTATION PROCEDURES

No special equipment is required, and all materials are provided. No specific previous training is required, but a 1-day training session for leaders is recommended.

ASSURANCES AND CLAIMS

Assurances

No reports of harm—physical, psychological, sociological, or other—have been received at this time as a consequence of any activity of the product. Additional data will be collected during pilot and field testing.

No complaints of ethnic or sex-role bias have been received at this time. Additional data will be collected during pilot and field testing.

Claims

The Southwest Educational Development Laboratory follows a systematic process for the development of educational products. This product development incorporates the entire gamut of activities in the formulation, development, testing, and evaluation of an educational product so that quality is assured.

Products are cycled through design testing, after which materials are revised on the basis of feedback from the target population, leaders, and observers; through pilot testing, and revised on the basis of feedback; and finally field testing, after which a final revision based on field data is made.

The multimedia training package for Spanish-speaking paraprofessionals, *El arreglo de la sala de clase para buen comportamiento* is being cycled through the laboratory's developmental process and is currently in pilot testing.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Leader's manual, session procedures, and media projects (video tapes, filmstrips audiotapes, transparencies, game cards, pictures, and pamphlets)	Not determined	Not determined	Not determined	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Joyce Evans, Acting Program Director
Joyce Coleman, Component Coordinator

AVAILABILITY

This product exists in prepublication form only; no copies are available for distribution at this time. Development of two additional modules beginning in summer 1975 is anticipated.

INFORMATION CURRENT AS OF MARCH 1975 ■

THE IMPLICATIONS OF BILINGUAL EDUCATION FOR DEVELOPING MULTICULTURAL SENSITIVITY THROUGH TEACHER EDUCATION

An aid for teachers who are sensitive to the cultural differences of their pupils

Teachers must be continually alert to the difference in languages, values, and customs and seek to understand their students as real people. Otherwise, the student who must learn English as a second language develops insecurity instead of security. When the acceptable norm in a class has been based on the work of the typical middle-class Anglo, the culturally different student meets with predetermined failure. Language maturity needs to be assessed in these children in terms of auditory discrimination of all necessary phonemes and the habitual use of the current syntax or grammar. Interaction with the teacher, on an individual basis, is also crucial for the child. If the child understands sound patterns in English, the beginning instruction should be in English; if Spanish, the instruction should be in Spanish. The second language should be introduced systematically but gradually to develop genuine bilingualism in the student. The bilingual-bicultural program encompasses all the domains of the learning process. The student should acquire the concepts and skills of two languages and should attain a positive self-image through the understanding of cultural values. A multicultural program increases the appreciation of the contributions of other cultures and fosters the democratic ideal.

SUBJECT AREA(S)

This publication is intended for bilingual teachers and their trainees.

INTENDED USERS AND BENEFICIARIES

The teacher education community is the intended user.

GOAL(S) OR PURPOSE(S)

The publication deals with biculturalism, particularly as it relates to bilingualism. It is published to help both preservice and inservice teachers become conscious of cultural differences and contributions, and then convert their knowledge and appreciation into sound educational practices.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Miles V. Zintz, Author
Mari L. Ulibarri, Author
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AVAILABILITY

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Arlington, Va. 22210

RD 110 058

CONFRONTATION: HUMAN RELATIONS TRAINING UNIT

A set of films to aid teachers in analyzing specific interpersonal race-related problems in their school

This human relations training unit was originated by Far West Laboratory for Educational Research and Development, Oakland Unified School District, San Francisco Unified School District, University of California education extension, and educational television station KQED. It was originally designed for teachers and administrators in multiethnic elementary and high schools in the large urban school districts of the San Francisco Bay area. The pilot project, *Confrontation: Human Relations Training Unit*, was adapted and disseminated by the Anti-Defamation League in 1970. The goal is to help teachers and other school personnel to analyze specific interpersonal race-related problems in their own school and to propose and implement solutions. The components of the 10-hour unit are an introductory film, four "stimulator" films presenting typical school problems acted out by real students and teachers (not actors), and discussion leader training films. Subjects covered by the course are: Increasing communication and understanding between school administration and the community; ways in which teachers' language offends minority-group students; rules dealing with dress codes (such as, dress, hair length, sunglasses); and classroom conflicts.

The unit must be implemented by a coordinator for the whole school district. The coordinator introduces the program to school principals and staffs, organizes groups at each school by means of a preview film, trains discussion leaders for all the groups, and evaluates each group. At each participating school, teachers meet for five separate sessions, which begin with the viewing of a film in a large group. For instance, the second session begins with a film about language that alienates. A black student is shown listening to a transistor radio during class. The teacher grimaces, comments "I do not understand how you people can afford radios but do not bring a pencil to class," and threatens to confiscate the radio permanently. After watching this film, the group divides into small groups of 10 for 2-hour discussions of the issues which the film raises. They discuss issues in their own school and their own behavior. The composition of the small groups remains the same for the whole course. Discussion group leaders, who have undergone 10 hours' training to prepare to be leaders, are provided with suggestions for stimulating discussion about each film. Sample discussion starters for the film deal with the teacher's attitude toward the student's property, what is conveyed by the teacher's facial expressions, and what "you people" means to the teacher and to the student. At the end of the fifth and final session, participants and discussion leaders fill out evaluation forms on the group experience.

The distributor intends that the small-group staff discussions continue after the completion of the formal course. Besides the immediate awakening to problems and retraining of attitudes, the course can provide an ongoing pattern of more open staff communication.

SUBJECT AREA(S)

This training unit deals with human relations.

INTENDED USERS AND BENEFICIARIES

Intended users are administrators, teachers, and other staff members in multiethnic middle and high schools, youth-group and church-group workers, and preservice trainees in education. The product is also suitable for use with teenagers in secondary school social studies programs.

GOAL(S) OR PURPOSE(S)

Participants become aware of personal and institutional attitudes and actions that are prejudicial to minority groups in their own school and discuss and implement solutions that can improve the "human relations climate" of the school. Another goal is to train teachers and administrators to be effective group discussion leaders.

PATTERNS OF USE

The five films, discussion leader's guide, and coordinator's handbook make up a complete inservice (or preservice) training program that can be implemented either for staff in a single school building or on a districtwide basis, or as a class program at a training institution.

ASSESSMENT PROVISIONS

After viewing films of simulated problems, participants discuss them in small groups, relate filmed problems to their own school situations, and propose ways to achieve better human relations. The discussion leader/guide suggests ways of evaluating progress during the sessions, and the coordinator's handbook provides techniques for assessing the impact of the overall training.

TIME REQUIREMENTS

Five sessions of approximately 2 hours each are recommended.

IMPLEMENTATION PROCEDURES

Discussion leaders are trained to preside over groups of 10 participants to lead analyses of behavior shown in the films, to relate them to their own school and personal behavior, and to stimulate plans for improving the school's treatment of minority-group students and parents. In a required 10-hour training course, discussion leaders analyze scenes in films that participants will see and then role play in order to learn how to deal with participants who may hinder discussion.

A coordinator introduces the unit to each school in the district, forms and schedules groups, recruits and trains discussion leaders, and evaluates each group. Consulting help may be contracted through the educational services staff of the Far West Laboratory.

A 16mm sound film projector is needed.

ASSURANCES AND CLAIMS

Assurances

Despite the controversial nature of the films' content, neither the laboratory nor the distributor has received any complaints. On the contrary, the distributor reports continual enthusiasm for the product by users.

Claims

Testing of the participants in the Far West Laboratory's pilot study in 1968 indicated that the unit did create interest and awareness of problems and could change teacher attitudes. The filmed problems were judged to be significant at the time. However, some of the problems are now dated (such as, the one on miniskirts and long hair); those on race are understated by today's standards; there are only a few situations illustrating the unique situations of Spanish-heritage and Chicano students. In some urban areas, the language presented in the film would seem very mild. Whether attitudes and behavior actually change would seem to depend on the openness and vitality of the interpersonal exchange in the discussion groups. This in turn depends upon the skill of the discussion leaders—especially those working with interracial groups. So it appears that the success of the program rests heavily on the coordinator's ability to recruit, select, and train discussion leaders. To attract participants and good discussion leaders, the distributor suggests that inservice salary credit be granted.

RD 110 058

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
5 films	1 each per school district	410.00 for purchase of whole package; 50.00 per week for rental; 25.00 for preview	Reusable	
Discussion leader's guide	1 per discussion leader*	Additional leader guides may be purchased at 1.95 each		
Coordinator's handbook	1 per coordinator			

*A discussion leader is recommended for each group of 10 participants.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Staten Webster, Professor of Education
University of California, Berkeley
Berkeley, Calif. 94720

AVAILABILITY

This human relations training package was copyrighted in 1970; copyright is claimed until 1981. It is currently available from the distributor:

Anti-Defamation League
315 Lexington Ave.
New York, N.Y. 10016

INFORMATION CURRENT AS OF MARCH 1975 ■

TRANSCULTURAL COUNSELING: NEEDS, PROGRAMS, AND TECHNIQUES

An analysis of literature concerning the counseling needs of minority groups

Counselors and other social professionals, as well as laypersons, have been and are increasingly concerned with the guidance and counseling needs of the cultural and ethnic groups in our society. New programs need to be implemented and existing ones revised and updated. This publication will sensitize as well as activate the intended audience to provide needed services and help to this segment of society.

SUBJECT AREA(S)

Subject areas will include a review of the literature and specific programs and practices relating to the counseling of minority persons.

INTENDED USERS AND BENEFICIARIES

Intended users include counselors, pupil personnel workers, graduate students, counselor educators, and administrative personnel.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To review, analyze, and draw implications from the literature concerning the counseling needs of minority groups and (2) to review specific programs and procedures for counseling with minorities.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

AVAILABILITY

This monograph will be available in September 1975 from:

ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

OVERVIEW

MARY ELLEN VERHAYDEN-HILLIARD
American Personnel and Guidance Association
Washington, D.C.

and

MARY LOU RANDOUR
National Institute of Education
Washington, D.C.

Since the passage of title IX of the Education Amendments of 1972 forbidding sex discrimination in educational institutions, increasing numbers of educators have been analyzing sex discrimination in education and developing methods to eliminate it. With some answers now in hand, there is a need to alert all educators and other significant adults to the phenomena of sex discrimination and to provide them with resources that can be used to recognize and overcome the destructive consequences of the explicit and implicit sex role stereotyping which limits goals and, therefore, the lives of students.

The literature on sex discrimination provides a description of the current role of the woman in society, her history, and how it is changing. It also reveals that sex role stereotyping, sex bias, and sex discrimination have their taproots deep in the widely held belief that girls should spend their adult lives only as wives and mothers whose financial needs will be taken care of by husbands. This role model affects the self-concept of girls and women by limiting their perception of what is considered "appropriate" to do regardless of their real abilities and interests.

Because of this stereotyped perception, few girls and young women have been self-motivated or encouraged by educators to make long-range plans in order to develop ongoing careers, independent of possible later marital or parental status. The tragedy is that the Cinderella archetype, living happily ever after with little need or desire to work, bears little resemblance to the statistical reality.

The American woman of the 1970's is a person who works outside the home (45 years if she remains single and 25 years even if she marries); she may be divorced (the divorce rate has risen 109 percent since 1962 and is still climbing). In divided families she is usually responsible for the children and she may find child support to be nearly nonexistent. Finally, whether she is single, married, or divorced she will discover that she will live longer than most men and is likely to find herself among the two-thirds of the elderly poor who are women.

Ms. Mary Ellen Verhayden-Hilliard, who is the Director of the Sex Equality in Guidance Opportunities Project at the American Personnel and Guidance Association, Washington, D.C., prepared the Overview section on the state of the art.

The section on NIE products was prepared by Ms. Mary Lou Randour, Educational Associate in the Education and Work Group at the National Institute of Education, Washington, D.C.

Of the 54 percent of American women between the ages of 18 and 65 who are in the labor force, the majority are locked into jobs such as clerical help (35.2 percent) and service workers (16.6 percent) such as beautician and waitress. Of all working women, only 15 percent are professional women and three out of four of these are either teachers or nurses. Even in the professional area the jobs are not on a career ladder. For example, although 68 percent of all elementary and secondary teachers are women, less than 1 percent of the school superintendents are women. Additionally, even when a woman works at the same job as a man she can expect to make less money for the same work.

Educators must begin to examine and to assess their role in the reinforcement process that ignores or minimizes full development of a girl's potential. Methods must be developed to assist girls and women to explore widely and to assess their educational and career plans based on abilities and interests rather than restrictive sex role stereotypes.

What must be emphasized repeatedly is that present sex role stereotypes are a serious disservice not only to girls and women, but also to our society as a whole. Because females have not been allowed, or encouraged, to select from all of the possible societal roles, society has not been able to receive the full benefit of women's potential.

Keys to understanding the blocking processes of sex role stereotyping and discrimination in education, and in society, are needed in order to remove those blocks and allow the creative abilities in women to be expressed and used. Girls and women, even those with the highest education, have been allowed and encouraged to view themselves as preparing for an essentially satellite role. This role places them in a secondary position, as an adjunct and homemaker for the male breadwinner. It is time for educators to convey to the American girl and woman that it is appropriate for her to achieve, independent of possible marital or parental status, and that rather than accepting a sex-based limitation she must begin to question those who expect her to adapt to an underachieving, secondary status as a life pattern.

Breaking through the sex role barriers and enlarging the career goals and options of girls and women may be the most important contribution practitioners can presently make to a girl's education.

Women now represent 53 percent of the total population in the United States. Underappreciation of their talents ignores their abilities and wastes enormous resources of human energy. In recognition of this dilemma, the National Institute of Education has developed a series of products to help educators understand the dimensions of this problem.

NIE and sex fairness activities

Awareness of the dynamics of sex role sterotyping must precede action if real progress is to occur. The Far West Laboratory for Educational Research and Development (San Francisco, California), in conjunction with the Stanford Center for Research and Development in Teaching (Stanford, California), has developed a number of films dealing with various aspects of the problem. Three films deal exclusively with awareness and sensitivity to sex role stereotyping. Part of the *Protocols on Sex Role Stereotyping in Schools*, these films demonstrate specific instances of the negative effects of sex role stereotyping. By viewing and discussing these films students and teachers can begin to establish a framework for interpreting behavior vis-a-vis sex biases.

The mature woman reentering education or work also needs well-informed support. The increased divorce rate, later age marriages, and woman's heightened awareness of herself as an independent individual have greatly increased the numbers of women reentering the worlds of work and education. *The Women and the World of Work* catalog (Educational Development Center, Newton, Massachusetts) is an invaluable aid to counselors working with these women, and to the women themselves.

Recognizing the enormity of the problem, one can see that while the existing NIE products provide a valuable and needed service, they are not enough. Developing NIE activities, which will make a further contribution, include research being done by the Women's Research Program inhouse at the NIE.

The current understanding of how girls and women now express their achievement needs and how they could express them is being studied by the Women's Research Program. Achievement roles are conceptualized as direct and indirect. Direct achievement requires persons to act in an assertive way on their own behalf to further their own career goals. For example, occupational roles associated with direct achievement are surgeon, truckdriver, and politician. The sex associated with these occupations is invariably male. Indirect, or vicarious achievement roles, are enabling, facilitating, and backup roles. Examples of occupational roles associated with this mode are nurse and secretary. These roles are an extension of the wife/mother role in the family which requires nurturing, facilitating behavior in which achievement needs are satisfied vicariously through the achievement of others.

Since human beings possess both the ability to achieve directly as well as the capacity to take pride in someone else's achievement, the ideal would be for both sexes to be able to use either mode depending on the situation, but not on the sex role. The Women's Research Program is in the process of developing conceptual frameworks needed to underpin a new understanding that will encourage and enable girls and boys, women and men to express direct or indirect achievement aspirations. Achievement will depend on individual needs and circumstances, but not on sex roles.

A further NIE effort is being made through television—a powerful force which reaches millions of children and the significant adults in their lives—to expand career awareness by reducing the negative consequences of sex and race roles. *The Television Career Awareness Project* currently under development will attempt to show that interests and occupational roles are not sex linked and that general interests which children have could potentially be translated to occupational roles in a broader way than is currently done. The NIE effort in this area is very important because it utilizes a medium which children watch with interest and respect even before they enter school. The forces that shape girls' career interests and aspirations begin early and come from many sides. Television can be used productively to counteract the traditional stereotypes and present new alternatives.

The supporting materials and activities to this effort, such as the *Parent and Teacher Guide* and the community outreach activities, reflect the importance of conveying the same information to parents and school personnel in order to reinforce the hoped for change in children's concept.

NIE, and specifically the Education and Work Group and the Women's Research Program within NIE, are working to carry out their mandate "to assure all individuals an equal opportunity to receive an education of high quality regardless of race, color, religion, sex, national origin, or social class."

Coordination and communication

In conclusion, if the effects of the NIE research and development activities are to be long lasting, an ongoing social/political relationship between national and local levels must be developed. It is clear that these efforts to end sex discrimination will have significant impact only if both those with the power to institute change as well as those working actively with students have the information and procedures they need to move forward. For programs to have widespread impact, communication of the research findings and the program materials must be disseminated widely. This *Catalog* is a beginning step in that direction.

RD 120 001

AFFIRMATIVE ACTION: WOMEN'S RIGHTS ON CAMPUS, REPORT NO. 6

An examination of laws governing affirmative action programs on sex discrimination on campus

Traditional sex discrimination on college and university campuses is coming to a halt. Recent Federal Affirmative Action requirements call for the development of procedures to promote and insure the equitable treatment of faculty and staff women in employment and promotion to provide them with fair representation in all aspects of campus activities. More than 80 percent of the Nation's colleges and universities are affected by the Federal Affirmative Action Program and are threatened with loss of Federal funds for failure to comply. This report examines the current laws governing affirmative action programs and sex discrimination on campus, and describes the approaches universitites and colleges have taken to comply with the laws.

SUBJECT AREA(S)

Current affirmative action programs and sex discrimination are examined in this report.

INTENDED USERS AND BENEFICIARIES

This monograph is designed primarily for State and Federal agencies, institutions of higher education, policymakers, and decisionmakers concerned with sex discrimination and policies eliminating discrimination in their institutions or agencies.

GOAL(S) OR PURPOSE(S)

This 48-page monograph was planned originally as a literature review foundation for researchers, thereby saving them time in reviewing the affirmative action issue, and presenting them with the basic facts concerning these issues so that they could expand and develop their own programs. This monograph also serves as a guide for administrators in developing their personnel policies.

ASSURANCES AND CLAIMS

This monograph was used in discussions at Oberlin College with administrators, faculty, and students. It was judged the most comprehensive survey of the issue at that time from both a legal standpoint and in terms of a practical application of the law.

DEVELOPER/AUTHOR:

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AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 002

GIRLS AT 12
(PART OF THE ROLE OF WOMEN IN AMERICAN SOCIETY PROJECT)

A film for grades 10-12 on the impact of sex role stereotyping on career choice

Girls at 12 is a 1/2-hour, unstaged documentary film (16mm, color) about three young friends—Diane, Mary Ann, and Laura—going about their daily lives in a small industrial city just outside Boston. The focus is on their transition into adolescence, including the many complex influences at home, school, and in their peer group that are shaping the girls' identities as women and their expectations about the future. Despite the girls' clear energies and abilities, the overriding pressures call for them to be pretty, popular, and (eventually) married. Careers are secondary, even though people in the film recognize that realities and opportunities for women are changing fast.

The film is aimed primarily at 10th-, 11th-, and 12th-grade students. It also has wide appeal and many applications for adult audiences. Its primary purpose is to stimulate discussion and increase audience understanding of the way the socialization process occurs (i.e., the ways cultural expectations about adulthood, "manhood," and "womanhood" are passed on) and the impact that socialization patterns, particularly sex-role stereotyping, can have on men's and women's lives and career choices. These insights can help high school students to become more realistic and more creative in making decisions for their futures.

Curriculum materials to accompany the film have been funded by the Ford Foundation. These include *Vignettes*, short filmed interviews with five women who play a role in the girls' lives; a teacher's guide suggesting ways to work with the film and *Vignettes* in a variety of classroom situations and course contexts; and a student resource book, including activities, bibliography, and filmography to help students further explore film-related issues.

The film and accompanying resources are the first curriculum unit in a proposed 10-unit, film-based semester high school course exploring turning points and critical stages in women's lives.

SUBJECT AREA(S)

The film may be used as the basis for a minicourse in a variety of subject areas or can be integrated into a range of ongoing courses in such areas as social studies, English, humanities, health, home economics, women's studies, guidance, film, and teacher training. Since the film is open-ended and has an identity both as art and as primary source material, it lends itself to flexible use.

INTENDED USERS AND BENEFICIARIES

The film is aimed primarily at 10th-, 11th-, and 12th-grade students. It is being used in classrooms with differing racial, ethnic, and economic backgrounds. Although developed for high schools, it is also widely used by adult audiences including parent groups and PTA's, women's groups and colleges; professionals working in guidance, social service, and education; career placement firms; libraries, community groups, and church associations; and State departments of education, particularly curriculum and resource divisions.

GOAL(S) OR PURPOSE(S)

The primary purpose is to help adolescents examine a critical stage in women's lives so that they might begin to make more informed choices at crucial points in their own lives, particularly in relation to work and careers.

Other goals are: (1) To provide teachers and students with a shared, repeatable body of primary source material of an involving nature; (2) to provide much needed teaching materials at the high school level relating to women's issues; and (3) to help teachers and students consider value-laden issues relating to men's and women's roles so that differing points of view would be acknowledged and respected, and subjective feelings and attitudes could be shared without infringement of privacy.

PATTERNS OF USE

Although the film is intended eventually to be part of a larger film-based high school curriculum, it may be put to a wide variety of uses. It can stand alone; it can be shown to parents and other adult groups, and it can be used for teacher training for a minicourse, for example, in sex-role socialization of adolescents. (The accompanying Ford-funded curriculum resources provide for a minicourse on the sex-role socialization of adolescents, particularly adolescent girls.) It can be integrated into a range of ongoing courses at both the high school and college levels in such areas as social studies, English, humanities, home economics, women's studies, guidance, and film.

The film is not didactic but is more a form of source material that raises issues and questions without posing solutions. This open-ended quality allows individual teachers and classes to start with differing concerns and carry their investigations in different directions with varying degrees of complexity, for example, in some classroom situations, the teacher or leader might use the film to start discussion about socialization processes in students' own lives, a form of consciousness raising. In another situation, the film might be source material for a class studying sex-role socialization or psychology of women. In addition, many teachers have felt that their students learn a new form of "literacy" in learning to see the subtle socialization processes that the film explores.

The film is a resource which can work by itself or in combination with other materials and discussion to energize many different kinds of learning, ranging from consciousness raising to substantive inquiry in the direction of a formal discipline. The possibilities are as limitless as the energy and imagination of teachers and students who participate.

ASSESSMENT PROVISIONS

Evaluation of a traditional kind is currently beyond the scope of this project for two reasons. First, the film and accompanying materials are designed to help students explore questions of personal values. Increased awareness and attitudinal change are slow to appear and difficult to assess precisely. It is even more difficult to pinpoint the cause of such change because heightened social consciousness is accelerated by the mass media and the larger community as well as by peers, families, schools, individual research, and experience. Second, the overall design of the curriculum is modular. Separate films can be turned to any number of uses. Teachers and their classes will go in many different directions from the common start provided, and the goals, potential behavioral outcomes, and criteria for success will vary. Consequently teachers will want to define their own specific classroom objectives and methods of evaluation at this stage.

TIME REQUIREMENTS

Refer to "Patterns of Use."

IMPLEMENTATION PROCEDURES

The film does not require any special equipment or facilities beyond the use of a 16mm projector. The only organizational requirements would be the adaptation of the product into the normal classroom schedule. Although no formal teacher training is necessary, both a teacher's guide and a student resource book will be available in the future for better implementation of the film.

Although the issues in the film involve both boys and girls, some teachers have encountered initial mixed reactions in using this product with boys. Particularly in classes of younger students, boys may be defensive, having heard just enough about "women's lib" to consider women as the enemy. The topic that the class is considering is socialization and life at 12; although the focus is on socialization of girls, the topic can be presented as one which affects both sexes.

Personnel Required for Product Adoption and Implementation

A classroom teacher with knowledge of 16mm projector/audiovisual equipment is all that is required. The teacher requires no special training to present the film to the class.

ASSURANCES AND CLAIMS

The information gathered from pilot trial and subsequent use in seven Boston area schools indicates that the materials can stand alone in the hands of a competent teacher and can be successfully implemented without additional aid beyond that given in the teacher's guide. The film was designed to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content. The developers have not received any reports of harm associated with the use of this product. The film and support materials have evoked from students and teachers the desired positive response. The film has been used satisfactorily by a large number of high schools, colleges, and other organizations without developer assistance. Although the film portrays three 12-year-old Caucasian girls in a middle-class, industrial city adjacent to Boston, the socialization issues posed are relevant to all races and to both sexes.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Girls at 12 (16mm sound, color, 30-min film)	1	330.00(sale) 25.00(rental)	Reusable	
Teacher's guide (optional)	1	Not determined	Reusable	
Student resource book (optional)	1 per 2 students	Not determined	Consumable each time product is used	

DEVELOPER/AUTHOR:

Education Development Center, Inc.
55 Chapel St.
Newton, Mass. 02160

Adeline Naiman, Project Director
Joyce Chopra, Producer/Director

AVAILABILITY

The teacher's guide and student resource book are in the final stages of production and will be available in fall 1975 under EDC copyright. Copyright for the film was authorized in 1974 to cover the period of development, test, and evaluation. It expires April 30, 1976. The film is available from:

EDC Distribution Center
39 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

PARENT-STUDENT HANDBOOK ON SEX BIAS AND STEREOTYPING: IMPLICATIONS FOR CAREER PLANS (A PRODUCT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)

A resource for parents of high school students on techniques for helping their children become aware of sex bias in the career world

The *Parent-Student Handbook on Sex Bias and Stereotyping: Implications for Career Plans* will provide a resource for parents of high school students. Research has shown that parents are very influential in the development of the career aspirations of their children. The handbook will give parents information about sex bias and stereotyping, as well as possible techniques for helping to counteract their effects. Among them is helping their children become aware of the pervasiveness of sex bias and stereotyping in the career world. School personnel may distribute the handbook to parents for their own use or employ it as the basis for discussion groups. Parents are the intended audience. The individual reads the information and is given suggestions for possible activities involving the students, the school, and the community.

SUBJECT AREA(S)

Careers, counseling.

Product topics include: Probability that children (both sons and daughters) will work, status of women in the work world (past, present, and future), importance of parents as "significant others," socialization practices that can lead to sex bias and stereotyping, activities for further involvement in the topic area, and a bibliography.

INTENDED USERS AND BENEFICIARIES

The range of potential users is extremely broad: Parents of high school students, parents of children who will be high school students, and people who intend to become parents. The ultimate beneficiaries are the students who will benefit by becoming aware of the wide range of options available to them as they are making their career plans.

GOAL(S) OR PURPOSE(S)

(1) To inform parents about the effects of sex bias and stereotyping on the career interests and opportunities of youth, (2) to provide activities that parents can use to counteract the effects of sex bias and stereotyping on the career interests and opportunities of their children, (3) to make clear to parents that public schools are obligated to maximize opportunities of all children to benefit from the full range of school programs, and (4) to acquaint parents and students with the rights of people to equal opportunity in education and employment.

PATTERNS OF USE

The handbook is intended for self-instructional use by parents, as individuals, as a mother-father pair, or with their children. In addition, the handbook may be used as the basis for group discussions. The extent to which the users involve themselves in the suggested activities is expected to vary widely.

ASSESSMENT PROVISIONS

There is no formal testing. A later followup study could be funded to provide information on self-reported changes in attitudes and behaviors.

TIME REQUIREMENTS

Since this product is intended for individual or family use, time completion will vary.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are required. Some schools may choose to use the handbook as the basis of group discussion. In those cases, the designated person in charge would need to arrange for meeting time and place, probably after regular school hours.

Personnel Required for Product Adoption and Implementation

There are no specific requirements, as the handbook is intended to stand alone. However, if schools choose to use it for group discussion, the leader (counselor, teacher, administrator, parent) should be knowledgeable about the area and should have experience in leading discussions.

ASSURANCES AND CLAIMS

This product will provide information documented in the professional literature about sex bias and sex stereotyping and its implications for career planning. No comparable products exist for comparison; however, the need for such a product has been widely stated. Although the material to be presented will be factual, it seems unavoidable that the attitudes of some people will lead them to reject the information.

The handbook will not perpetuate social biases. In fact, it is explicitly designed to deal with the social bias of sexism.

The handbook is being developed on a short-time line (February 1, 1975, to June 30, 1975), so only minimal testing of potential use by parents will be possible. Reviews of the handbook are scheduled for May 1975. Information will be made available following the review.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Parent-Student Handbook on Sex Bias and Stereotyping: Implications for Career Plans (handbook)	1 per family unit	To be announced	Yearly	

DEVELOPER/AUTHOR:

Center for Vocational Education
Ohio State University
1960 Kenny Rd.
Columbus, Ohio 43210

Robert E. Campbell, Program Director
Louise Vetter, Work Unit Director

AVAILABILITY

The handbook is under development; no copies are available for distribution at this time. Final decisions have not been made about distribution. The handbook may be distributed through the Center for Vocational Education, through the National Institute of Education, through the Government Printing Office, or through a commercial publisher.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 004

PROTOCOLS ON THE PROCESS OF CHANGE (SEX ROLE STEREOTYPING IN SCHOOLS)

Two films to demonstrate how to bring about changes in stereotyped thinking in student career choice

Developed under a protocol materials grant from the U.S. Office of Education, these two films present examples of classroom activities designed to change stereotyped thinking. Each film illustrates a model of attitude change that involves: Attention (focusing on the stereotype); comprehension (finding instances that contradict the stereotype); retention (reinforcing awareness of contradictory evidence); resistance (rejection, partial or complete, active or passive, of contradictory evidence); and change (voluntarily or spontaneously exhibiting new behavior demonstrating nonacceptance of the stereotype).

Changing Images shows a 4th-grade classroom in an Oakland, California, school. Over a 5-week period, the teacher helps the students examine stereotypes concerning careers appropriate for males and females. As essential parts of the change process, the students first reveal their stereotypes about careers and sex roles through artwork and discussion. They later begin to discover contradictions between the stereotypes they have expressed and elements of their own experience. They begin to understand that the ideas they have had about male and female occupations may be inaccurate. By the 5th week, some of the students have begun to think about career choices that are usually only chosen by the opposite sex.

Women Emerging provides a more complicated illustration of the same change process. The film depicts the development, over a 4-month period, of a multiethnic women's studies class in a Berkeley experimental public high school. The two teachers, who are Chicano and Black, and the students, who are Black, Oriental, Chicano, Armenian, and White, explore numerous stereotypes and realities about women in different ethnic groups, women and careers, and interactions with men. Racial stereotypes are also examined. In wrestling with certain erroneous assumptions about women, the students succeed in seeing the inaccuracy of the stereotypes and actually begin to change their views of themselves. Yet, in other instances, the young women are still not able to distinguish myth from reality. Thus, the change process as seen in this film is complex.

The handbook, *The Process of Change*, contains: An introduction to the topic of sex role stereotyping in schools and an explanation of why this is an area appropriate for change efforts, a brief summary of the research on attitude change, a presentation of the change model illustrated in the films, annotated transcripts of the films, elementary school example and a high school example of how the change process concept can be applied in teaching practice (these examples are in addition to those provided by the films), recommendations for use of the films and handbook in inservice and other training settings, a list of resources on the topic of sex-role stereotyping, and a list of references to attitude change research.

SUBJECT AREA(S)

The subject area is teacher training in awareness of the process of attitude change.

INTENDED USERS AND BENEFICIARIES

These protocols are intended for use by teachers, teacher trainers, teacher trainees, school administrators, elementary and secondary school students, parents and other community members, and those concerned with women's studies.

GOAL(S) OR PURPOSE(S)

The major goal is to identify instances of the stages in the process of changing sex role stereotypes.

PATTERNS OF USE

These two films can be shown in any sequence, or a single film can be shown in isolation. Each film should be followed by discussion. It is recommended that films and discussion be supplemented by directed observation in classroom settings.

ASSESSMENT PROVISIONS

There are no provisions for assessment of student learning contained in this set of materials.

TIME REQUIREMENTS

Films and discussion require a minimum of 2 hours, if shown at a single session. Followup observation and later discussion and analysis of that observation would require an additional 2 hours of student time (1 hour out of class and 1 hour in class).

IMPLEMENTATION PROCEDURES

These materials are readily usable in the standard discussion format for college class meetings or inservice workshop sessions. The handbook provides the instructor with all necessary background information as well as suggestions for use of the films.

ASSURANCES AND CLAIMS

There is no evidence to suggest that this product, when used as directed, will be harmful. No complaints of harm have been made as a result of any of the presentations which have been made to many groups comprised of teachers only; teachers, administrators, and students; and teachers, administrators, parents, and students. In all instances of use by the producers, viewing the films has been combined with discussion and reading. After every formal presentation, at least one member of the audience has been impressed enough to contact the producers to arrange for an additional presentation to a new audience.

This product does not perpetuate sexism, racism, or other biases. Its content centers on helping teachers to become aware of such biases and to combat them. The children and teachers depicted in the films were carefully chosen to include a variety of cultural backgrounds. Teachers who have been instructed with the films have commented favorably about both the multicultural and nonsexist aspects of the materials.

This set of films, which is accompanied by a manual for use by both students and instructors, has been used by many presenters without developer assistance of any kind. These presenters have typically been people who have participated as students in earlier presentations, but they have received no specific training in use of the materials. In none of these instances has evidence of resultant learning been gathered, but outside presenters have commented favorably on audience involvement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Handbook, *The Process of Change*	1 for instructor (optional: one per pupil)	Not determined	Reusable	
16mm, black-and-white film (15 minutes) *Changing Images*, on confronting career stereotypes	1 copy	Not determined		
16mm, black-and-white film (30 minutes) *Women Emerging*, on comparing cultural expectations	1 copy	Not determined		

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Oakland Unified School District
1025 2d Ave.
Oakland, Calif. 94606

Greta Morine, Project Director
Gloria Golden, Codirector
Lisa Hunter, Assistant Director

AVAILABILITY

The films and handbook were completed in January 1975. They should be available for distribution in spring 1975 with the expectation that they would be available for sale and rental by November 1975. For further information contact:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 005

PROTOCOLS ON SEX ROLE STEREOTYPING IN SCHOOLS

Three films to increase awareness of sex role stereotyping

Developed under a protocol materials grant from the U.S. Office of Education, these three films provide a way to increase awareness of sex role stereotyping by presenting actual examples. Each of the 23 instances in the films was drawn from events observed by or reported to the project staff.

By viewing, thinking about, and discussing the events in the films, teachers and students can acquire a framework for interpreting behavior, their own and others'. The films will not eradicate sex role bias; that is not their purpose. They are intended only to answer such important questions as: "What are sex role stereotypes?" "What do they look and sound like?"

Hey! What About Us? provides a fresh insight into sex role stereotyping in physical activities in school, including physical education classes, playground games, and boisterous behavior in the classroom.

I Is For Important focuses on sex role stereotyping in social interactions and emotional expression. It includes sequences depicting sex role biases displayed by teachers in their disciplinary actions and pupil task assignments, resistance by children to role reversal in kindergarten play, anxiety felt by boys over appearing to be a "sissy" before their peers, frustration experienced by boys who attempt to assume a nurturing role or express emotions such as sorrow or tenderness, and the indoctrination of girls with commercial definitions of beauty.

Anything They Want To Be explores sex role stereotypes in intellectual and career-oriented activities. Covering both elementary and high school events, the film illustrates two themes: The low level of competence expected of girls in both academic and vocational problem-solving tasks and the subtle manner in which girls' career aspirations are channeled.

The films were designed to provoke discussion. They can and should be used along with other information. An accompanying handbook, *In All Fairness*, contains an introduction to sex role stereotyping as an issue of current concern, a summary of some of the research on sex differences, suggested resources for further exploration of the topic, annotated transcripts of the films, and suggestions for their use.

SUBJECT AREA(S)

The subject area is teacher training in awareness of sex role stereotyping.

INTENDED USERS AND BENEFICIARIES

These protocols are intended for use by teachers, teacher trainers, teacher trainees, school administrators, elementary and secondary school students, parents and other community members, and those concerned with women's studies.

GOAL(S) OR PURPOSE(S)

The goal of the protocols is to identify instances of sex role stereotyping when they are observed in school settings.

PATTERNS OF USE

These three films can be shown in any sequence, or a single film can be shown alone. Each film should be followed by discussion. It is recommended that films and discussion be supplemented by directed observation in classroom settings.

ASSESSMENT PROVISIONS

There are no provisions for assessment of student learning contained in this set of materials.

TIME REQUIREMENTS

Films and discussion require a minimum of 2 hours, if shown at a single session. Followup observation and later discussion and analysis of that observation would require an additional 2 hours of student time (1 hour out of class and 1 hour in class).

IMPLEMENTATION PROCEDURES

These materials are readily usable in the standard discussion format for college class meetings or inservice workshop sessions. The handbook provides the instructor with all necessary background information as well as suggestions for use of the films.

ASSURANCES AND CLAIMS

There is no evidence to suggest that this product, when used as directed, will induce harm. No complaints of harm have been made as a result of any presentation. Presentations have been made to many groups, which have been comprised of: Teachers only; teachers, administrators, and students; and teachers, administrators, parents, and students. In all instances of use by the producers, viewing of the films has been combined with discussion and reading. After every formal presentation, at least one member of the audience has been impressed enough to contact the producers to arrange for an additional presentation to a new audience.

This product does not perpetuate sexism, racism, or other biases. Its content centers on helping teachers to become aware of and to combat such biases. The children and teachers depicted in the films were carefully chosen to include a variety of cultural backgrounds. Teachers who have been instructed with the films have commented favorably about both the multicultural and nonsexist aspects of the materials.

This set of films, which is accompanied by a manual for use by both students and instructors, has been used by many presenters without developer assistance of any kind. These presenters have typically been people who have participated as students in earlier presentations, but they have received no specific training in use of the materials. In none of these instances has evidence of resultant learning been gathered, but outside presenters have commented favorably on audience involvement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
In All Fairness (handbook)	1 for instructor (optional; 1 each per pupil)	1 provided with each film order (1 to 24 additional copies, 5.00 each)	Reusable	
Hey! What About Us? (16mm color film, 15 min.)	1 copy	Sale 200.00, rental 17.00	Reusable	
I Is For Important (16mm color film, 12 min.)	1 copy	Sale 160.00, rental 15.00	Reusable	
Anything They Want To Be (16mm color film, 7 min.)	1 copy	Sale 95.00, rental 12.00	Reusable	

DEVELOPER/AUTHOR:

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San Francisco, Calif. 94103

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

David Berliner, Project Director
Gloria Golden, Associate Director
Lisa Hunter, Assistant Director

AVAILABILITY

The product was published in January 1975 and is being distributed by:
University of California
Extension Media Center
Berkeley, Calif. 94720

Investigating Your Environment is available from:
Addison-Wesley Publishing Company
2725 Sand Hill Rd.
Menlo Park, Calif. 94025

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 006

SEX ROLE DEVELOPMENT IN YOUNG CHILDREN: AN ABSTRACT BIBLIOGRAPHY

A bibliography of materials in the ERIC system about recent research on sex role development in young children

This selective abstract bibliography contains recent references to the development of sex role in infants, preschool, and elementary school children. Entries are from *Resources in Education* (RIE) and *Current Index to Journals in Education* (CIJE).

INTENDED USERS AND BENEFICIARIES

This bibliography is being prepared to alert early childhood teachers, researchers, and students to materials in the ERIC system related to the sex role development of young children. This publication would also be of interest to parents, social workers, psychologists, and students.

GOAL(S) OR PURPOSE(S)

The goal of this bibliography is to provide information on recent research reports and papers on sexism and sex role development—an area of much interest in early childhood education.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Norma K. Howard, Compiler

AVAILABILITY

Cost of this bibliography is undetermined at this time. An ED number is to be assigned.

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

In preparation:
Publications Office/IREC
University of Illinois
College of Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 007

SEX ROLE AND PUPIL ROLE IN EARLY CHILDHOOD EDUCATION

A paper on the interaction of sex role with pupil role in early childhood settings

This paper analyzes the interaction between sex role and "pupil role" in the early childhood education setting. It postulates that teachers and schools have demonstrated investment in socializing children to a passive, docile, and dependent role, beginning at the preschool level. This role, called "pupil role," corresponds closely to the traditional female sex role and is incongruent with the standard male sex role. Thus, boys experience conflict and stress in school while girls accommodate to the passive learning style associated with pupil role. The long-range implications of these differential interactions are discussed, along with suggestions from research and theory about the benefits of active over passive learning strategies. Recommendations are offered for teacher training and school reform.

SUBJECT AREA(S)

Subjects discussed in this paper include: Student-teacher relationship and teacher expectation, sex differences and sex role perception, behavior development, and classroom environment.

INTENDED USERS AND BENEFICIARIES

This paper is designed for teachers, administrators, trainers of teachers, and other personnel in early childhood education programs and public schools.

GOAL(S) OR PURPOSE(S)

The goal of this paper is to make teachers and teacher trainers more aware of the interaction of sex role with pupil role in early childhood settings and the problems this interaction presents for both boys and girls.

DEVELOPER/AUTHOR:

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805 West Pennsylvania Ave.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 100 491, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from:
Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Dr.
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 008

SOUNDS OF CHANGE: A REPORT ON TRAINING IN COUNSELING AND PROGRAMING FOR WOMEN'S CAREER OPPORTUNITIES

A report on a workshop for adult women planning to return to work

More and more adult women are returning to work. Women who consider such a return after several years of absence from work need special orientation, identification, and encouragement to bridge the gap. The Extension Division of the University of California at Los Angeles designed a several-week workshop to facilitate such change. This report is an account of the activities and some of the conversations which took place in the sessions of that workshop.

SUBJECT AREA(S)

Subject areas include women returning to work, counseling mature women, and bridging the gap from home to work.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are adult and continuing educators and counselors of adults.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to give practitioners a detailed example of a successful innovative program for encouraging women to follow their convictions upon moving from home back to work.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

in cooperation with:

Adult Education Association of the United States
Otis Building
810 18th St. NW.
Washington, D.C. 20006

Yolande Chambers, Coauthor
Rosalind Loring, Coauthor
Sallie O'Neill, Coauthor
Lou Hartney, Coauthor

AVAILABILITY

Sounds of Change is currently in progress and should be available early in fall 1975 from:

ERIC Clearinghouse in Career Education
204 Gabel Hall
Northern Illinois University
De Kalb, Ill. 60115

Adult Education Association of the United States
Otis Building
810 18th St. NW.
Washington, D.C. 20006

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 120 009

WOMEN AND THE WORLD OF WORK (PRODUCT OF THE HOME-COMMUNITY-BASED CAREER EDUCATION MODEL III)

A manual to help women in their career development

During the past 2-1/2 years, the Career Education Project has concentrated much of its effort on providing information, guidance, and referrals to an often-neglected group needing special assistance with career plans: Women who are not yet in the full-time labor force. These women face more than the usual pressures of acquiring skills, choosing a career, and finding a job; they also face the obstacles of sex stereotyping, discrimination in hiring and advancement, societal pressures to remain in the home as wives and mothers, and the absence of sources of unbiased career information and guidance.

Although the project has been able to help thousands of such women cope with these problems, millions more remain unassisted throughout the country. *Women and the World of Work* has been prepared to assist those who are involved in helping women with their career development and to help the career-concerned women themselves.

This product provides an analysis of the state of women in today's work world, examines their options, and presents some practical suggestions for action to overcome obstacles in planning for and implementing career decisions. Focusing on the concerns of women who seek to begin or resume a career, it specifically addresses those problem areas which the project's clients and counselors have confronted more frequently, issues which face most women in their career development.

After profiling today's working woman and examining the impact of sex stereotyping on her life, the product discusses nontraditional career opportunities in a variety of areas. It then discusses ways a woman can progress by taking stock of herself, learning about the world of work, finding appropriate training to prepare for a career, and then proceeding to enter the work world. Sample résumés, application forms, and interview questions are included as illustrations.

The next section deals with methods of coping with such problems as fears, doubts, child care responsibilities, financial need, and illegal discrimination. This is followed by a discussion of attitudinal, societal, employment, and legal changes which are beginning to alter the position of women in the work world. Finally, a detailed appendix summarizes recent laws and executive orders relating to working women.

SUBJECT AREA(S)

Subject areas include career education, continuing education, vocational and educational guidance, women's studies, and career counseling for women.

INTENDED USERS AND BENEFICIARIES

Women and the World of Work is intended for use by women seeking to begin, resume, or continue their careers and by groups, organizations, and individuals involved in helping such women. In the latter category, the product is particularly appropriate for career counselors, adult educators, and administrators of women's centers.

GOAL(S) OR PURPOSE(S)

The goals of this product are: (1) To provide an overview of the present state of women in the work world, the problems they face, and the sociocultural factors that explain their present position; (2) to discuss nontraditional career opportunities for women; (3) to provide a career planning approach for use with and by women; and (4) to serve as a prototype booklet about which the project can gain insight and feedback from other practitioners.

PATTERNS OF USE

Women and the World of Work may be used in whole or in part as an information source or a supplement to counseling sessions by a wide variety of individuals or agencies working with women. It is particularly appropriate for use by counselors, educators, and placement officers. The booklet may also be used independently by women as a guide to their own career planning. Further, it may be used as part of an ongoing course in women's studies or as an adjunct to awareness or consciousness-raising sessions.

It may be used in conjunction with other publications of the Career Education Project, especially the *Career Development Series*, the annotated bibliographies on career-related materials, and the series of manuals designed to show how to establish and operate a comprehensive career counseling service for adults.

ASSESSMENT PROVISIONS

The materials and information presented in this product reflect what has been learned from the formative evaluation of 2-1/2 years of providing information, guidance, and referral to career-concerned women. After copies of this booklet have been distributed, followup interviews will be conducted by phone, by mail, and in person with selected reviewers to assess its potential utility.

TIME REQUIREMENTS

Because this product can be used by such a variety of audiences in a variety of settings, the time requirements for implementing the described activities will also vary.

IMPLEMENTATION PROCEDURES

Although this product is independent and largely self-instructional, some users might find it helpful to have some assistance from career counselors, professional educators, or placement officers in implementing the described activities. Some readers might find it helpful to use *Women and the World of Work* in conjunction with other Career Education Project publications, as mentioned above under "Patterns of Use."

ASSURANCES AND CLAIMS

This manual contains products and descriptions of techniques determined to be effective on the basis of more than 2-1/2 years of formative evaluation. The manual itself, however, has not yet been distributed, so the developers cannot guarantee its transportability or harmlessness even though every attempt has been made to insure that the manual will have these characteristics.

The manual has been carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, and inappropriateness of content.

DEVELOPER/AUTHOR:

Education Development Center
55 Chapel St.
Newton, Mass. 02160

Nancy Tobin, Resource Center, Director, Coauthor
Barbara Lazarus Wilson, Information Unit Director, Coauthor

AVAILABILITY

Women and the World of Work is being produced under a developmental copyright granted in 1974. It will be available in fall 1975. The cost is to be determined.

Education Development Center
55 Chapel St.
Newton, Mass. 02160

INFORMATION CURRENT AS OF MARCH 1975 ■

EVALUATION, MEASUREMENT, AND NEEDS ASSESSMENT

OVERVIEW

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National Institute of Education
Washington, D.C.

and

LYNETTE FERRARA
Education Systems Director
TEAM Associates, Inc.
Washington, D.C.

The field of education is currently undergoing renaissance, resistance, and change. As never before in our history, it has become interwoven with and subject to the pressures, demands, and criticisms of other institutions (political, social, technological, and economic), leaving an atmosphere of expanded awareness, need orientation, and educational accountability. This process is exacerbated by immediate needs for knowledge and validated applications and by special interest group priorities. This demand for results cannot be met without accurate assessment, measurement, and evaluation.

A large number of factors have converged to produce the above demands. They include the public concern for more return on the dollars spent by the Federal Government on legislatively mandated evaluation; increased public criticism of the "state of the art" in education; and the thrust for equal educational opportunity. These factors have focused attention on the large number of educationally disadvantaged minority children who lack the basic skills of reading and arithmetic and for whom traditional assessment procedures and instruments are often of questionable validity and reliability.

A variety of evaluation models or approaches have been proposed. These models range from strict measurement approaches that closely resemble research procedures aimed at generating conclusion-oriented data to management information approaches oriented toward the generation of data for decision making. As there is little agreement or data to support the efficacy of one definition model or approach over another, the National Institute of Education (NIE) does not advocate any one definition of evaluation at this time. Empirical data are needed to determine the extent to which the various models are theoretically and operationally different and the particular purpose or goals to which they are best suited.

Most evaluation models are a strategy or set of activities oriented toward providing valid and reliable information to better carry out the function of judgment. Because good judgments depend upon accurate information, evaluation is a matter of generating, measuring, analyzing, and interpreting data. Limitations on the "state of the art" of assessment, measurement, and methodology may severely limit the validity of judgments that can be achieved. Measurement may be defined as a systematic procedure for the description of the behavior of individuals or groups of individuals. Needs assessment is a process by which individuals or organizations (e.g., school boards or parents) articulate goals and select and obtain measures of progress toward these goals or objectives.

Educators have always evaluated pupil ability and performance and assessed the efficacy of alternative instructional programs. For the most part, such evaluations or needs assessments have been based upon the educator's professional experience and knowledge of his or her pupils and community. Since the 1920's, educators have increasingly used "objective" measurement tools (standardized tests) to collect the information required for these judgments. These tests were designed to provide indicators of ability or performance less susceptible to error or bias than judgments derived solely from personal experience or intuition. Standardized tests were used to assign letter grades for course work, place pupils in instructional programs, and select students for admission to educational institutions. The use of such tests gradually diffused to other societal institutions. During World War I the Army used a battery of standardized tests as an aid in the assignment of new recruits. The success of the Army program encouraged the adoption of testing by business and by Government agencies seeking objective tools for selecting and assessing employees.

The number and variety of consumers of the output of measurement tools have grown to include Federal and State administrators and legislators, representatives of interest groups (e.g., business, labor, and ethnic/racial groups), and parents. The diverse information needs of this consumer public have spurred development of new types of measurement tools and the application of new and existing measurement tools to procedures for monitoring Federal, State, and local education programs. Three primary areas of concern have been: (1) The development of measurement tools free of social class, racial, or ethnic bias, (2) the application of these measurement tools to needs assessment and/or evaluation to insure that educational programs are demonstrating effectiveness; and (3) the development of measurement tools which provide evidence of demonstrated skills in both cognitive and noncognitive domains. The following paragraphs provide an overview of these developments and suggest areas where further research and development are required.

Dr. Daniel P. Antonoplos is a Senior Program Officer in the Measurement and Methodology Division of the Basic Skills Group of the National Institute of Education and an Adjunct Professor of Research at the American University in Washington, D.C.

Ms. Ferrara is Director of Education Systems of TEAM Associates. She has participated in design and development of measures of educational disadvantagement for Federal and State school finance systems.

VALUATION, MEASUREMENT, ND NEEDS ASSESSMENT

Trends

The educational measurement movement began as a search for reliable, objective measures of pupil ability or mastery of basic skills. The studies of Meyer (1908), Slack and Eliot (1913), and Falls (1928) demonstrated the wide variance in letter grades given by instructors in the same field of study and by the same instructor to the same paper at varying points in time. In 1910, Thorndike published the first quantitative scales for grading exercises in basic skills. By 1922, McCall was using teachers to develop their own objective tests. The first comprehensive battery of standardized tests, the Stanford Achievement Tests, was published in 1923.

Ability tests grew from the efforts of Binet to develop quantitative tools to identify children who would benefit from placement in schools for the retarded. These tools were first refined into a standardized test instrument in 1916. Pen-and-pencil tests to measure the ability of adults were developed to screen recruits during World War I.

The number and range of standardized tests of ability and performance grew during the 1930's and 1940's. The military and economic development of the cold war spurred the development and dissemination of standardized tests. Federal and State programs aided the expansion of universities and provided scholarship programs. However, such programs could not keep pace with the demand for college entrance. Education administrators who could accept only a fraction of applicants began to rely heavily on standardized measures of aptitude such as the Scholastic Aptitude Test and the Graduate Record Examination.

By the 1960's, the ever-widening influence of test scores raised concerns of members of ethnic and racial groups that tests normed on a white middle-class population or developed in the vocabulary of a white middle-class child were being used to delegate minority children to lower education tracks, excluding them from the college placement that would increase the likelihood of socioeconomic mobility. In many States, civil rights groups charged that biased ability tests were used to segregate minority children in special education classes. Others charged that biased testing had perverse effects on student, parents, and teacher by reinforcing attitudes of inferiority which tended to lower achievement motivation.

A second trend is reflected by an increased demand for tests that would provide information on individual performance that could be interpreted without reference to the performance of other test takers. Most standardized tests were norm-referenced; they provided information on the placement of a pupil's ability or performance in reference to a specified norm group. Criterion-referenced tests measure an individual's ability to demonstrate specific knowledge or skills. A criterion-referenced test administered at the beginning of a program measured the learning needs of each pupil. A criterion-referenced test administered at the end of a program was an indicator of the success of the program in attaining its specified objectives. The National Assessment of Educational Programs (NAEP) which began large-scale testing in 1970 is an example of such a testing program. Items demonstrating levels of knowledge in 10 subject areas are being developed. The popularity of criterion-referenced tests is demonstrated by their adoption in 21 State testing programs. Three of these States (Iowa, Maine, and Minnesota) have adopted some or all of the NAEP testing instruments.

A third trend of the past decade has been the movement toward evaluation of educational programs. The 1960's saw a great expansion of Federal, State, and local programs to provide aid to pupils with special needs (e.g., compensatory education for economically or educationally disadvantaged children). These programs were developed at a time when three other movements in public administration were in vogue:

- A renewed concern for public involvement in the administration of Government programs at the State and local level. This concern was typically expressed through a requirement for a parent advisory council to monitor program design and progress.
- An enthusiasm for program budgeting. This concern was expressed through a requirement that budgets relate expenditures to specific objectives rather than line-item expenditures.
- A concern for accountability. This concern demanded that programs have specified objectives and collect and publish information that would allow monitoring of progress toward this objective.

Title I of the Elementary and Secondary Act of 1965 is typical of such programs. It requires advisory councils, program budgeting, and evaluation. Funds are set aside at the Federal, State, and local level for ongoing needs assessment and evaluation programs.

Titles III and V of the same act provided additional stimulation to the growth of State and local evaluation and needs assessment programs. Title III funds to support the development of supplementary education centers and guidance, counseling, and testing services to local school systems. These funds assisted States in providing local school systems the funds and technical assistance required to develop a testing program. In addition, the evaluation of innovative programs is funded by this act. Title V grants to State departments of education have been a significant source of funds for the development of State testing and assessment programs. Funds are available to finance the development and implementation of a statewide testing program and to develop a management information and dissemination system so that the collected data may be readily used in a State or local needs assessment and evaluation program.

States, as well as the Federal Government, became increasingly concerned with needs assessment and accountability. By 1973, every State had begun the development of an assessment or accountability program; 16 of these were mandated by the State legislatures. Seventeen of the programs collected information for State-level decisionmaking, including collection of data for a program budget or management information system or for inclusion in the formula used to allocate Federal or State school aid funds. Thirteen States had programs which emphasized collection of information for local-level decisionmaking.[1] In 22 States, programs with one or both of these objectives are under development. Although each program requires the establishment of educational goals and objectives and administration of test instruments, program emphasis varies. Wyoming, Kansas, and Georgia initiated programs to encourage local community involvement in definitions of the goals and objectives for the State school system. Testing instruments have been or are being developed to measure progress toward these goals in basic skills, special subjects, and noncognitive areas. In New York, Pennsylvania, and New Jersey, data collected for use in the State program-budgeting system are made available to school district and school administrators and teaching staff. The State sponsors seminars to assist local school staff in interpretation of testing results. Other States such as Colorado provide technical assistance and financial support required by local districts to select local goals and objectives and monitor progress toward these goals.

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[1] New York has two active testing programs, one in each category.

Practitioner needs

The educational practitioner at the State and local level is called upon to develop programs to monitor the development of individual pupils and to assess and evaluate instructional programs. Federal, State, and local officials, representatives of interest groups, and parents demand that such programs provide detailed information of demonstrated skills in both cognitive and noncognitive domains. Despite the proliferation of measurement tools, there are still areas which need further research. Even when testing materials exist, the local practitioner requires the specialized training to recognize testing instruments appropriate for his or her community and to integrate these instruments into a needs assessment and evaluation program suitable to the community characteristics, educational objectives, and instructional programs. Many of the available needs assessment or evaluation program models require a degree of control over assignment of children and teachers to instructional programs beyond the reach of school officials. Evaluation or assessment of many school programs requires the development of models which do not require a control group or random assignment of children or pupils. In addition, school officials must be trained to interpret the results of a testing program to the community and to school staff who fear accountability will mean a negative evaluation of their performance. This requires training in the interpretation of statistics and leadership in organization and community groups, skills not usually found in the same individual.

NIE response

The National Institute of Education's Measurement and Methodology Division has articulated four goals: (1) To provide for research on technical issues related to measurement and evaluation (e.g., multiple-program/multiple-project evaluation, test bias, test-score decline, and measurement of program implementation); (2) to strengthen understanding of existing measurement strategies for educational research and where appropriate, develop new measurement strategies (e.g., research on norm-referenced versus criterion-referenced measurement, ways to measure the size of an effect, and methods of noncognitive assessment); (3) to improve understanding of existing design-and-analysis strategies and, where appropriate, develop new design-and-analysis strategies (e.g., for estimating causal effects from nonexperimental data; for making appropriate use of data aggregation; and for designing longitudinal research) and (4) to improve knowledge of how to evaluate educational programs and products (e.g., research on improving the utility of evaluations, taking into account the human, social, political, and organizational factors affecting the generation and usage of evaluation results).

NIE's attack upon theoretical and methodological constraints in measurement, methodology, and evaluation coincides with a strong practitioner-oriented focus aimed at immediately improving the acceptability and conduct of evaluations in the public schools.

In order to directly address consumer needs, the NIE has completed the development and dissemination of evaluation training materials (kits) and workshops, and handbooks to assist school superintendents, principals, and other school personnel staff to conduct needs assessments, program planning, progress evaluation, and outcome evaluation, and standardized test selection matched with instructional objectives. Many of these products are described in the section which follows.

Data from the consumers indicate that many of the evaluation products listed in the *Catalog* are now in use in every State of the Union and in 22 foreign countries. To date, over 10,000 school administrators have undergone evaluation training workshops to increase their evaluation skills and train their own school staffs. In addition, over 15,000 Test Evaluation Books matched with instructional objectives have been distributed to improve the selection and uses of measuring instruments in the schools.

The demands for knowledge, improvement, and accountability in education necessitate that the NIE continue its course of action on two major fronts: (1) To build a research and development knowledge base, continually improving the theoretical and technical state of the art in education and research; and (2) to directly meet the needs of educational consumers.

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CSE ELEMENTARY SCHOOL EVALUATION KIT: NEEDS ASSESSMENT

The "consultant-in-a-box" for school personnel responsible for program evaluations

What are the goals of education? Everyone has an answer to the question, and the focus varies from place to place—even within a community. It is a difficult task for an individual elementary school principal to ascertain the precise wishes of the school's constituents for the program of education the school should pursue. Research has produced methods for performing a "needs assessment" for a local school. These sophisticated methods have usually required the expense of a highly paid educational consultant who often seems to be interfering in the school's internal matters. The Center for the Study of Evaluation (CSE) has taken the best available procedures for needs assessment and made a "consultant-in-a-box."

The Guidebook is the essential component of the product. It is a manual/textbook providing instruction in evaluation methods for either a single decisionmaker or for using input from teachers, parents, and community members. The Guidebook instructs a principal in sampling parent, teacher, and community input for choosing and ranking goals through goal cards and questionnaires. Teachers and parents sort the cards according to the importance each places on each goal. The Parents' Goal Rating Questionnaire can be distributed by mail. Parents respond to the items and return them to the administrator.

Chapter 3 provides the decisionmaker with procedures for selecting and evaluating tests to measure skills that correspond to the goal statements. Chapter 4 describes procedures for selecting and obtaining standardized tests, two methods for administering tests, determining the frequency of test administrations, and organizing and interpreting the analyzed data. Chapter 5 details procedures for selecting critical problem areas and describes various methods in communicating the results of the evaluation to students, teachers, parents, and school board members.

SUBJECT AREA(S)

Selecting educational goals, educational evaluations, and community participation in decisionmaking are the subject areas of this product.

INTENDED USERS AND BENEFICIARIES

The kit was specifically designed for elementary principals to use with members of the community; it could also be used by superintendents, curriculum planners, educational consultants, teachers, school boards, parents, and any other decisionmakers at grade levels 1-6. A secondary audience for the kit is the educational researcher who uses the kit as a reference tool and does not actually implement or use the procedures.

GOAL(S) OR PURPOSE(S)

The purpose of the *Needs Assessment Kit* is to provide elementary school principals with systematic procedures for making informed, rational decisions about the goals most appropriate for their schools.

Specifically, the goals are: (1) To provide procedures for gathering information about goals which the school should be meeting, (2) to instruct the principal in selecting tests to measure student performance on highly rated goals, (3) to provide the principal with an effective way of interpreting the school's test scores in relation to those of other schools with similar characteristics, and (4) to show the principal how to use a decision model to transform the information already gathered into a set of critical need areas for the school. After completing the kit, the user should be able to make meaningful, explicit assessments of a school's educational needs.

PATTERNS OF USE

CSE Elementary School Evaluation Kit: Needs Assessment is a self-contained, step-by-step system for goal determination. The user (generally an elementary school principal) has flexibility in deciding the degree of community involvement and the procedure (card-sort or questionnaire approach) to be used. A principal may use the kit to determine the high-priority goals in the school or to validate previously determined priority areas.

ASSESSMENT PROVISIONS

The product is a support tool for the principal/superintendent. The kit does not address itself to "trainees." There is no assessment instrument.

TIME REQUIREMENTS

The time required is 3 weeks of an elementary school principal's time and 2 hours for each teacher, parent, or community member who participates in goal rating.

IMPLEMENTATION PROCEDURES

No special equipment is required. Since the kit does require a considerable amount of the principal's time and since the needs assessment procedure will be highly visible within the school and community, it is essential that the principal be committed to making program changes based on the needs assessment. A 30-day examination period is provided by the publisher so that the potential user can decide whether the kit's needs assessment techniques are appropriate for the user's particular school situation.

Personnel Required for Product Adoption and Implementation

An elementary school principal with no special training in measurement and evaluation can implement the *Needs Assessment Kit.* The principal will decide who is to be involved from the school staff, parents, and other community members; these individuals need no training in education but must be able to read English.

ASSURANCES AND CLAIMS

The information in the kit was based on input from elementary school principals and superintendents. The components of the kit were tried out with educators at national meetings and with 23 principals and superintendents in California. The major field test of the kit was conducted during fall 1971 in 69 schools across the country and 103 schools in California. Several conclusions and revisions resulted from the field tests.

The kit will continue to be addressed primarily to principals because they are the main decisionmakers in selecting educational programs. Principals found the kit useful because they do feel pressured to make realistic needs assessment and because the kit's card-sort procedures assist principals in involving teachers and parents in making their decisions.

The kit provides useful information regarding test selection and evaluation; developers expanded the published kit to make test results more useful to principals. Some changes were recommended and made for the card-sort procedures, e.g., number of cards, illustrated instructions, and expanding part of the card-sort process to present questionnaire.

The goal statements seemed to be comprehensive and effectively organized, but parents and community members had difficulty with the vocabulary (1,265 words or phrases were not understood). Since the time of that field test, the language of the goal statements had been revised and tested with a group of parents from low and middle socioeconomic levels. After the goals were rewritten, only 58 words or phrases were not understood, and these dealt primarily with modern mathematics terms.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CSE Elementary School Evaluation Kit: Needs Assessment:				
Complete kit including guidebook, 24 copies of principal's goal-rating form (4 for each grade level), 48 copies of parent goal-rating questionnaires, 10 decks of goal cards (106 cards per deck), 10 sets of rating mats (5 per set), and 50 goal card tally sheets	1 per school	114.95	Reusable, except questionnaires, rating forms, and tally sheets consumable each use.	
Replacement items:				
Questionnaires (48 copies)	1 set per additional 48 participants*	8.95	Consumable each use	
Principal's goal rating forms (24 copies)	1 per school	6.95	Consumable each use	
Goal card tally sheets (50 copies)	1 set per each additional 50 participants*	6.95		
Rating mats and goal cards (10 sets)	Variable	29.95	Reusable	

*Only 1 of these 2 sets of items would be used or replaced.

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Ralph Hoepfner, Project Director

AVAILABILITY

The materials were copyrighted in 1972; copyright is claimed until January 1978. The *CSE Elementary School Evaluation Kit: Needs Assessment* is available from:

Longwood Division
Allyn and Bacon, Inc.
Rockleigh, N.J. 07647

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 002

CSE ELEMENTARY SCHOOL FORMATIVE EVALUATION KIT

A comprehensive unit including detailed instructions for each step and formation evaluation of a school program with specific learner objectives

The *Formative Evaluation Kit* enables elementary school administrators to evaluate a program while it is in operation. A program, whether it is written or not, is considered to include all the instructional materials, personnel, facilities, processes, and related factors and resources used in achieving specified learner goals and objectives. The kit may be used to evaluate: (1) Programs with cognitive, affective or psychomotor goals and objectives, (2) programs for large or small numbers of students, (3) programs for students of varying abilities and backgrounds, (4) programs conducted in varying physical settings, and (5) programs of varying length.

The principal or an individual selected from the faculty is designated as program evaluator regardless of other roles and is charged with completing the 15 steps of the kit. These steps apply the CSE definition to the problem of completing a formative evaluation of any elementary school program with learner objectives. Each step is written in much the same way as a cookbook or as instructions for putting together a model airplane or child's bicycle. That is, instead of a theoretical discussion about evaluation, each step consists of specific instructions for conducting a part of the evaluation of a program selected by the user.

SUBJECT AREA(S)

Evaluation, administration.

GOAL(S) OR PURPOSE(S)

Formative evaluation can help teachers and administrators: (1) To determine the feasibility of a program in their school, (2) to determine whether a program is operating as planned, (3) to identify aspects of a program where improvement or change is desirable, and (4) to increase student achievement of program objectives and goals.

PATTERNS OF USE

The kit divides the process of planning and conducting the evaluation into 15 successive steps. Each of the steps is presented in a separate folder. Each folder contains materials and instructions which systematically guide the user in applying the step to the program to be evaluated. The kit is designed to be completed one step at a time. Although it may be helpful, it is not necessary to read through all of the steps before beginning the evaluation. The steps include: (1) Reviewing the program plan, (2) constructing an evaluation plan, (3) identifying evaluation questions, (4) selecting a measurement strategy, (5) estimating evaluation resources, (6) selecting evaluation measures, (7) setting evaluation deadlines, (8) establishing communication, (9) collecting data, (10) discovering unanticipated outcomes, (11) scoring measures, (12) preparing data for presentations, (13) making recommendations, (14) implementing recommended changes, and (15) preparing formal reports.

ASSESSMENT PROVISIONS

The kit is an assessment device.

TIME REQUIREMENTS

Approximately 10 percent of the time spent in developing and teaching a program should be devoted to use of the kit materials. Any money available may be used in a variety of ways to reduce the time required. The kit is appropriate to the evaluation of programs of any length, but is most appropriate to those of semester or school-year duration.

IMPLEMENTATION PROCEDURES

The kit has been carefully adapted to the typical elementary school situation. It requires no special equipment, special services, or training, and minimal organizational activities. It is completely reusable for the evaluation of an indefinite number of programs.

ASSURANCES AND CLAIMS

Local pilot testing, national field testing to date, review by technical experts in evaluation, and review by two independent boards of elementary school personnel from California, Colorado, Maryland, and Connecticut have failed to identify any aspects of the materials likely to affect users negatively. These same procedures suggest that the kit materials are replicable and transportable. The national field test involves 40 schools in 27 States using the kit across grades K to 6 to evaluate programs in rural, urban, and suburban settings. A wide variety of data on each step of the kit materials is being collected as part of the field test. This data will be made available as a Center report, probably by the end of 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Kit*	1	Under 50.00	5 years	

*Use of the kit requires either an office copier or spirit duplicator. The user has the option of buying commercially available evaluation instruments or developing "inhouse" instruments. Otherwise, the kit is complete.

DEVELOPER/AUTHOR:

Center for the Study of Evaluation (CSE)
UCLA Graduate School of Education
Los Angeles, Calif. 90024

David Churchman, Project Director
Joseph Petrosko
Laura Spooner-Smith

AVAILABILITY

The *CSE Elementary School Formative Evaluation Kit* is being field tested nationally in 40 schools in 27 States during the 1974-75 school year.

The kit carries a 1973 copyright date, and application will be made upon publication for a limited copyright of 5 or 10 years.

Final revision of the kit is underway and will be completed by June 1975. The kit will then be submitted to publishers for consideration. Allyn & Bacon, publishers of the *CSE Needs Assessment Kit*, have the right of first refusal as publishers.

Additional information concerning the publication status of the summative kit will be available after June 1975.

Order from:
David Churchman
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 003

EVALUATION WORKSHOP I: AN ORIENTATION (EW-I)

A set of highly structured training materials focusing on the major steps and components in the evaluation of educational programs

Evaluation Workshop I: An Orientation is a set of highly structured training materials that provide preserive and inservice instruction for school administrators and the staffs of State and Federal educational agencies and programs. This training normally takes 2 days to complete and usually involves a group of about 30 participants. Its focus is on the major steps and components in the evaluation of educational programs. The workshop materials consist of a participant's notebook that serves as a postworkshop reference tool and field guide, an extensive set of group exercises dealing with typical and important evaluation problems, and a detailed leader's manual. This leader's manual eliminates the need for highly trained (and expensive) workshop leaders or consultants and thereby helps to insure the workshop's transportability, flexibility, and wide dissemination.

The workshop activities are organized so that the participants are first given instruction in a phase of the evaluation process such as how to conduct a needs assessment. The participants (who have been grouped into three-member teams) then attempt to solve a common problem in this phase. At the conclusion of this exercise, the workshop leader provides concrete feedback on how this problem should have been handled and conducts a discussion of the alternative method that might be used. This sequence of instruction, exercise, feedback, and discussion is followed in each of the major phases of the evaluation process and is presented in the context of a typical educational program to insure realism and applicability. Further, the procedures and techniques described in the workshop are those that have been tested and found to be professionally sound and cost effective.

Some of the topics covered by the workshop include: How to conduct a needs assessment, how to build the evaluation design into a program plan, how to determine whether a program is being implemented properly, how to assess the extent to which it is making satisfactory progress, and how to present evaluation data in a form that is understandable to the public. In the course of the workshop, the participants are given exercises requiring the selection, collection, analysis, and reporting of evaluation information in a way that will facilitate and improve educational decisions. The developers of this workshop are also constructing indepth workshops in each of the topics covered by *Evaluation Workshop I: An Orientation* to further educate those who must carry out specific evaluation functions.

SUBJECT AREA(S)

Educational program evaluation is the subject area of the workshop; included in the training are the following stages of evaluation: Needs assessment, program planning, implementation evaluation, progress evaluation, and outcome evaluation.

INTENDED USERS AND BENEFICIARIES

Evaluation Workshop I: An Orientation is appropriate for a variety of educational personnel including: Superintendents, evaluators, project directors, and other administrators; teachers; graduate students; and project monitors. Individuals in the health and social sciences have found participation beneficial also.

GOAL(S) OR PURPOSE(S)

Evaluation Workshop I: An Orientation is directed toward two major goals: (1) Participant understanding of the kinds of information an evaluation can provide for educational decisionmaking and (2) participant understanding of the general procedures and problems involved in selecting, collecting, analyzing, and reporting that information.

The degree to which workshop participants develop such understanding will be determined by the attainment of the following intermediate objectives: (1) Naming, describing, and properly sequencing the major evaluation activities; (2) identification of appropriate data selection, collection, analysis, and reporting procedures for each major evaluation activity; (3) identification of proper and improper use of evaluation techniques, methodology, and design; (4) identification of the kinds of information that should be generated by each evaluation activity; (5) identification of the kinds of information that are needed before evaluation decisions can be made; and (6) identification of the specific functions of the evaluator and those of the project director in each evaluation activity.

RD 130 003

PATTERNS OF USE

The workshop may be used as a one-time training unit or as part of an inservice or preservice program. The workshop has been used as part of a 3-day session on writing proposals. EWI may be the first session of a training program using other workshops provided by the developer.

ASSESSMENT PROVISIONS

The package includes three forms of an assessment instrument to be used as pretests and posttests. In addition to providing data on the achievement of each session's participants, the testing serves to formalize the training and set a tone of "down to work" at the beginnning of the first day. A participant questionnaire is also included in the materials to provide information on the particular leader's effectiveness and to gather data for revision.

TIME REQUIREMENTS

The workshop is highly structured and intended for a 2-day presentation; it may be adapted to a series of 4-hour sessions.

IMPLEMENTATION PROCEDURES

No equipment is required which would not ordinarily be found in a school or other institutional setting. The room arrangements are detailed in the leader's manual.

Personnel Required for Product Adoption and Implementation

One leader who has previously attended the workshop can effectively conduct the training workshop for 24 or more participants. In large groups, a second leader is often employed. The organization arranging the workshop has three options for selecting a leader: An individual within the organization who has previously participated in the workshop, an independent consultant who has previously participated in the workshop (a fee would be charged in addition to materials cost), a representative of the publisher who would provide all materials and conduct the workshop for $100 per participant.

ASSURANCES AND CLAIMS

The development of the workshops's content and organization was guided by the Center for the Study of Evaluation's model of the evaluation process. This model, in turn, was generated by the center's experience in conducting educational evaluations as well as by the writing of recognized experts in the field and the suggestions of educational administrators and evaluators.

The first draft of the workshop went through a series of feasibility tests to determine its appropriateness for the target audiences and to identify components needing modification. When the necessary revisions were made, the workshop was field tested by the center's staff to insure that it achieved its objectives. At the conclusion of the field testing, the workshop was again revised and then released for operational testing. The operational testing was conducted by noncenter staff and provided a check on whether the workshop still achieved its objectives in its final form and under the wide range of conditions in which it would eventually be used. A followup impact study also was conducted in order to be certain that the participants used the workshop training and materials on their jobs. These field tryouts involved over 1,000 participants from numerous local, State, and Federal agencies across the country.

Information obtained from the pretesting and posttesting, the questionnaires, and the impact study indicates that the workshop is effective in reaching its instructional goals, that the training is valued by the participants, that many of the participants use the materials and implement the preedures after the workshop, and that the individuals would recommend the workshop to their colleagues and would themselves participate in additional workshops developed in the series.

In addition to development and field testing of the participant's materials, the leader's manual for the workshop was thoroughly field tested by the developers. Once having participated in a workshop, any educational professional can competently train colleagues. Since the workshop was commercially published, most of the training has been conducted by individuals not associated with the product's development. Data indicate that workshop leaders conduct the session in the manner prescribed in the manual.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant's notebook (including exercise pads, pretests, and posttests)	1 per participant	30.00 for more than 30 participants; 40.00 for smaller groups	Reusable as a reference source. Pads and tests are consumed.	
Leader's manual	1 per leader	40.00	Reusable	
Audiotape (use is optional)	1 per leader	Included with leader's manual	Reusable	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation (CSE)
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Stephen P. Klein, Project Director

AVAILABILITY

Evaluation Workshop I: An Orientation was published in 1971 and is available from:

CTB/McGraw-Hill
Del Monte Research Park
Monterey, Calif. 93940

The materials were copyrighted in 1971 and developmental copyright is claimed by the University of California until June 30, 1976. At that time an additional copyright will be requested for a revised edition of the materials.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 004

EVALUATION WORKSHOP II: NEEDS ASSESSMENT (EW-II)

A set of highly structured training materials focusing on the major steps and components of a needs assessment project

Evaluation Workshop II: Needs Assessment (EW-II) is a set of precisely structured training materials that provide preservice and inservice instruction for school administrators and the staffs of State and Federal educational agencies and programs. Training normally takes 2 days to complete and involves a group of approximately 30 participants. Its focus is on the major steps and components needed to conduct needs assessments of educational programs. The workshop materials consist of a participant's notebook that serves as a postworkshop reference tool and field guide, an extensive set of group exercises dealing with typical and important evaluation problems, and a detailed leader's manual. The leader's manual eliminates the need for highly trained, expensive workshop leaders or consultants. This feature accounts for EW-II's transportability, flexibility, and wide dissemination.

The workshop activities are organized so that the participants are first given instruction in a phase of the needs-assessment process. The participants, who have been grouped into three-member teams, then attempt to solve a common problem in this phase. At the conclusion of this exercise, the workshop leader provides concrete feedback on how the problem should have been handled and conducts a discussion of the possible alternative. This sequence of instruction, exercise, feedback, and discussion is provided for each of the major phases of needs assessment and presented in the context of a typical educational program to insure realism and applicability. Further, the procedures and techniques described in the workshop have been tested and found to be professionally sound and cost effective.

Some the the topics covered by the workshop include: How to determine the relative importance of various educational objectives, how to assess the degree to which they are being achieved, and how to decide which ones should be the primary focus for program development or improvement. In the course of the workshop, the participants are given exercises requiring the selection, collection, analysis, and reporting of various kinds of information relevant to the needs-assessment process. The developers of the EW-II are also constructing workshops in other phases of the evaluation process such as program planning, implementation, progress, and outcome evaluation.

SUBJECT AREA(S)

Education evaluation and needs assessment. Needs assessment entails stating the objectives to be met by an educational program and determining how well an existing program is meeting those objectives.

INTENDED USERS AND BENEFICIARIES

Evaluation Workshop II: Needs Assessment is appropriate for a variety of educational personnel including: Superintendents, evaluators, project directors, and other administrators; teachers; graduate students; and project monitors. Individuals in the health and social sciences have also found participation beneficial.

GOAL(S) OR PURPOSE(S)

Evaluation Workshop II: Needs Assessment is directed toward the goal of providing participants with training in the procedures needed to conduct or participate in a needs assessment evaluation in their own educational institution. These procedures, along with the reference materials they receive, help them to identify high priority need areas for their own particular setting.

The degree to which participants develop such an understanding of needs assessment will be indicated through attainment of the following specific objectives: (1) Listing, in order, the major phases of a needs assessment and matching these with the key procedures and purposes of each phase; (2) describing the major approaches for identifying and developing objectives for a needs assessment and listing the merits and disadvantages of each approach; (3) describing the major methodologies of combining ratings from various groups and using these techniques to rank objectives in order of their importance; (4) listing the major factors to consider in setting up a data collection system; (5) setting appropriate standards of student performance; and (6) identifying goal and objective areas that should be the focus of subsequent planning activities.

PATTERNS OF USE

The workshop may be used as a one-time training unit or as part of an inservice or preservice program. EWII may follow *Evaluation Workshop I* which provides an orientation to evaluation.

RD 130 004

ASSESSMENT PROVISIONS

The package includes three forms of an assessment instrument to be used as pretests and posttests. In addition to providing data on the achievement of each session's participants, the testing serves to formalize the training and set a tone of "down to work" at the beginning of the first day. A participant questionnaire is also included in the materials to provide information on the particular leader's effectiveness and to gather data for revision.

TIME REQUIREMENTS

The workshop is highly structured and intended for a 2-day presentation; it may be adapted to a series of 4-hour sessions.

IMPLEMENTATION PROCEDURES

No equipment is required which would not ordinarily be found in a school or other institutional setting. The room arrangements are detailed in the leader's manual.

Personnel Required for Product Adoption and Implementation

One leader who has previously attended the workshop can effectively conduct the training workshop for 24 or more participants. In large groups, a second leader is often employed. The organization arranging the workshop has three options for selecting a leader. An individual within the organization who has previously participated in the workshop, an independent consultant who has previously participated in the workshop (a fee would be charged in addition to materials cost), a representative of the publisher who would provide all materials and conduct the workshop for $100 per participant.

ASSURANCES AND CLAIMS

The development of the workshop content and organization was guided by the Center for the Study of Evaluation's model of the evaluation process. This model, in turn, was generated by the center's experience in conducting educational evaluations, the writings of experts in the field, and the suggestions of educational administrators and evaluators.

The first draft of the workshop went through a series of feasibility tests to determine its appropriateness for the target audiences and to identify components needing modification. When the necessary revisions were made, the workshop was field tested by the center's staff to insure that it achieved its objectives. At the conclusion of the field testing, the workshop was again revised and then released for operational testing. The operational testing was conducted by noncenter staff and provided a check on whether the workshop still achieved its objectives in its final form and under the wide range of conditions in which it would eventually be used.

Information obtained from the pretesting, posttesting, and the questionnaires, indicates that the workshop is effective in reaching its instructional goals, that the training is valued by the participants, that many of the participants use the materials and implement the procedures after the workshop, and that the individuals would recommend the workshop to their colleagues and would themselves participate in additional workshops developed in the series.

In addition to development and field testing of the participants' materials, the leader's manual for the workshop was thoroughly field tested by the developers. Once having participated in a workshop, an educational professional can competently train colleagues.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant's notebook	1 per participant	30.00 for more than 30 participants; 40.00 for smaller groups	Reusable as a reference source	
Exercise pads	1 per team of 3 participants	Included in cost of participant's notebook	Consumable (placed in notebook during session)	
Pretests and posttests	2 per participant	Included in cost of participant's notebook	Consumable each use	
Leader's manual	1 per leader	40.00	Reusable	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation (CSE)
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Stephen P. Klein, Project Director

AVAILABIITY

Evaluation Workshop II: Needs Assessment was published in preliminary form in 1974 and is available from:

CTB/McGraw-Hill
Del Monte Research Park
Monterey, Calif. 93940

The materials received a developmental copyright in 1973. A limited copyright will be requested in 1975 for the published edition of the materials.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 005

CSE PRESCHOOL/KINDERGARTEN HIERARCHICAL OBJECTIVES CHARTS

A set of charts outlining the goals and objectives of preschool and kindergarten education

These charts depict one way of outlining the goals and objectives of preschool and kindergarten education. While the charts will have other purposes, they were designed to complement a needs assessment process.

As a part of the needs assessment process, the center has categorized the goals of preschool and kindergarten education into 21 broad goals and 75 subgoals. The major categories offered by these goal areas and subgoals are being used as a means to categorize all published standardized tests or subtests into the objective areas which they serve best. The tests are further rated in terms of a number of criteria in a published compendium of tests. This means that one might check the availability and quality of tests for each of the specified goal areas of education. For many of the goal areas, either no standardized tests exist or the quality of the offerings for that goal area is so poor that, in essence, the user has no choice.

Just as the 21 curriculum categories were designed to cover all goal areas of concern in preschool and kindergarten programs, so too, within each of the goal categories, the aim was to be as comprehensive as possible. Thus the hierarchies for each goal category represent the broadest range of possible objectives for preschool and kindergarten programs; that is, the objectives are designed to be useful for students of all ability levels within the age group of concern. For example, within the goal area MUSIC, objectives for the category "Singing Techniques" range from "sings in tune" to "interprets musical notation in order to sing a selection." While many teachers would be delighted if their students could just "sing in tune," those teaching at a preschool or kindergarten where students of exceptional musical talent are enrolled might find the objective of "interprets musical notation" very appropriate. In this respect, it is important to note that the most specific objectives within each of the hierarchies fall short of the specificity of behavioral objectives; that is, they do not describe measurable behaviors of students. In addition, the charts are not designed to be teaching hierarchies and therefore do not address themselves to the implementation of objectives into instructional programs. These limitations are necessary if the charts are to prove useful for all preschool and kindergarten educators regardless of program model or approach.

SUBJECT AREA(S)

Educational evaluation, program planning, curriculum development in all major content areas of early education. The charts are organized around the following domains: Affective, intellectual, psychomotor, and subject achievement.

INTENDED USERS AND BENEFICIARIES

The charts are intended as a resource for various individuals interested in early education, including principals, teachers, parents, teacher aides, and, to a lesser extent, district level curriculum experts and evaluation staff. University and other researchers have also used the charts. The ultimate beneficiaries are children between 30 and 72 months of age who will participate in the instructional or assessment programs developed with the aid of the charts.

GOAL(S) OR PURPOSE(S)

The purpose of the *CSE Preschool/Kindergarten Hierarchical Objectives Charts* is to provide a comprehensive and logical taxonomy of goals and objectives to aid the early childhood educator in the job of curriculum planning and assessment.

PATTERNS OF USE

Since the charts are comprehensive, they may serve to acquaint individuals with the range of objectives that might be adopted in early educational programs. In this regard, they can be seen as a "shopping list" of possible goals and objectives to be included in a program. Obviously no one program could include all of the objectives in all of the goal areas; selections from among the areas of the charts would be necessary. With the selection process naturally comes the issue of priorities.

While the charts provide the scope of possible objectives, decisions regarding selection of goals and objectives remain, appropriately so, with the individual users. Because the objectives within a goal area are of varying difficulty levels, they too reflect varying degrees of attainability; that is, with reference to children of a specific age and ability level, some objectives from the charts will be more easily attained than others. When selecting an objective, it would be wise to consider the knowledge, skills, and amount of time that will be required for specific children to meet the objectives.

The objectives charts can also serve as tools for ordering selected goals and objectives. With the "shopping list" available, the teacher will be able to plan how to sequence the learning goals in the classroom. Sequencing, a matter of considerable importance, demands a comprehensive preview of what is to be taught. The charts provide this preview. They do not prescribe the learning sequence, since this decision is made best by the individual user within the context of a total educational program.

Once priorities are established and selections of goals made, the task of operationalizing the objectives into specific, measurable behaviors still remains. The user may find published collections helpful in this regard. Of course, any one of the objectives of the charts might be operationalized in several different ways.

Because the charts are an outgrowth of the taxonomy of goals established for the *CSE-ECRC Preschool/Kindergarten Test Evaluations* book, the two products may provide a useful package for those concerned with assessment of program outcomes. After identifying objectives in one of the goal areas of the charts, the *Test Evaluations* book can then be easily referenced to also identify evaluation instruments available for those objectives. The articulation of these two products is a first step toward providing a common and comprehensive vocabulary of goals and objectives that could be utilized for the writing of evaluation proposals and for communication with school boards or parent groups.

TIME REQUIREMENTS

The amount of time required for use of the charts varies from about 5 minutes for brief inspection of one goal area to 1 year if the charts are to become an integral part of a school's planning procedures.

IMPLEMENTATION PROCEDURES

No special procedures are needed to use the charts.

Summary Cost and Personnel Information

Since the charts are used in a variety of ways and by a variety of types of personnel, no determination can be made as to the average cost. In some cases one set of charts, purchased for $10, would be used by a single individual with no special training. A case at the other extreme might be a school system which would buy a set of charts for every kindergarten teacher and provide a series of workshops on objectives; such a program would require a considerable cost in terms of personnel and materials. The developer has no documentation which would indicate such costs.

ASSURANCES AND CLAIMS

No impact or validation study of the charts has been conducted.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 set of charts (15), 17 by 22 inches	1 set per planning team or 1 set per individual	10.00	Reusable in most instances	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation (CSE)
UCLA Graduate School of Education
Los Angeles, Calif. 90024

AVAILABILITY

No copyright is claimed on the charts and users are encouraged to modify them for local needs.

The *CSE Preschool/Kindergarten Hierarchical Objectives Charts* has been available since 1973. Order from:

Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 006

CSE ELEMENTARY SCHOOL HIERARCHICAL OBJECTIVES CHARTS

A set of charts outlining 145 goals and objectives of elementary education

These charts depict one way of outlining the goals and objectives of elementary school education. While the charts have other purposes, they were designed to complement the Elementary School Needs Assessment Kit. The kit is intended to be used primarily by elementary school principals as an aid in selecting, collecting, and interpreting information that will be needed in making certain types of educational policy decisions.

As a part of the needs assessment process, the Center for the Study of Evaluation (CSE) has categorized the goals of elementary school education into 41 broad goals and 104 subgoals. The 145 major categories offered by these goal areas and subgoals are used to categorize all published standardized tests or subtests into the objectives areas which they serve best. The tests are further rated in terms of a number of criteria in a published compendium of tests. This means that one might check the availability and quality of tests for each of the specified goal areas of elementary education. For many of the goal areas, either no standardized tests exist, or the quality of the offerings for that goal area is so poor that, in essence, the user has no choice.

As an alternative, CSE has prepared these goal charts depicting the 145 goal areas and has analyzed each goal in terms of its subgoals or objectives in a hierarchical fashion. The charts contain objectives ranging from broad goals to more specific objectives which lead to but do not include behavioral objectives. Behavioral objectives may be added easily by referring to the many published collections of objectives.

The most important feature of the *CSE Elementary School Hierarchical Objectives Charts* is that they enable a potential user to begin the development of an objectives-based (criterion-referenced) evaluation system in areas where the offerings of standardized tests are poor or inappropriate.

The procedure for developing an objectives-based evaluation system for any area involves writing behavioral objectives for the statements in the last column of the chart. Many statements may demand several behavioral objectives. Each behavioral objective will require a pool of test items. Thus, the *Elementary School Hierarchical Objectives Charts* provide a framework for organizing the development of an objectives-based evaluation system. In addition, the charts provide a means of linking broad goal areas to specific behavioral objectives, assuring that the objectives used in the classroom are focused on achieving the more broadly stated goals of the system. This concept is at the very heart of the notion of accountability in education.

SUBJECT AREA(S)

The subject areas of this product include educational evaluation, program planning, and curriculum development in all major content areas of elementary school education. The charts are organized around the following major goal areas: Affective, arts-crafts-cognitive, foreign language, mathematics, music, physical education-health-safety, reading, religion, science, and social studies.

INTENDED USERS AND BENEFICIARIES

The charts are intended as a resource for various individuals interested in elementary school education, including principals, teachers, parents, teacher aides, and, to a lesser extent, district-level curriculum experts and evaluation staff. University and other researchers have also used the charts. The ultimate beneficiaries are students in grades 1-6 who will participate in the instructional or assessment programs developed with the aid of the charts.

GOAL(S) OR PURPOSE(S)

The purpose of the charts is to provide a tool for use in objectives-based curriculum or evaluation planning.

PATTERNS OF USE

A survey of users conducted 1 year after publication indicated that the charts were used in many ways. The following list indicates the most common responses to the survey. The charts were used: (1) To select important goals and objectives for an elementary school program, (2) to provide inservice training for teachers, (3) to organize objectives and goals into teaching units, (4) to assure that classroom activities were related to educational goals and objectives, (5) to develop or insure a comprehensive program for all elementary grades in the user's system, (6) to determine areas for testing or evaluation, (7) to write a course syllabus or other long-range plan, (8) to determine age or grade levels at which particular goals and objectives would be pursued, (9) to devise team teaching strategies, and (10) to develop weekly lesson plans.

ASSESSMENT PROVISIONS

Assessment is not appropriate for this noninstructional product. However, a survey of users was conducted by the developer to determine that the charts had value to purchasers and that the goals were comprehensive.

TIME REQUIREMENTS

The amount of time required for use of the charts varies from about 5 minutes for brief inspection of one goal area to 1 year if the charts are to become an integral part of a school's planning procedures.

IMPLEMENTATION PROCEDURES

No special procedures are needed to use the charts.

Summary Cost Information

Since the charts are used in a variety of ways and by a variety of personnel types, no determination can be made as to the average cost. In some cases, one set of charts purchased for $12.50 would be used by a single individual with no special training. A case at the other extreme might be a district which would buy a set of charts for every elementary school teacher and provide a series of workshops on objectives; such a program would require a considerable cost in terms of personnel and materials. The developer has no documentation that would indicate such costs.

ASSURANCES AND CLAIMS

The *CSE Elementary School Hierarchical Objectives Charts* were published as a "by-product" of research on elementary school evaluation. The goal hierarchy was developed for use in other products designed to provide needs assessment procedures for the elementary school principal. Many requests for a product such as the charts were received by the developer. No elaborate instructions are given for using the charts; the purchasers use them according to individual needs. The developers did conduct a small-scale survey of users; the following conclusions are based on the 167 individual responses.

1. The charts appear to be comprehensive. While 14 percent of all respondents suggested additional objectives, the majority of the suggested objectives were already included, usually in different terms.
2. Typically, the users indicated that they had used the charts in three different ways. The most common of these uses were selection of important goals and objectives for an elementary school program and provision of inservice training to teachers.
3. Most commonly, the charts were used by a committee or group of either teachers, or teachers and administrators. However, there was considerable variation in this pattern according to the way that the charts were used.
4. The charts were rated as "irreplaceable" 5 percent of the time, "extremely valuable" or "valuable" 61 percent of the time, "of some value" 21 percent of the time, and of "very little value" or "of no value" 5 percent of the time. (Other responses totaled 8 percent.)
5. No differences were found in the way the charts were used in schools in different regions of the country. Too few returns were received from government, research, and foreign purchasers to investigate differences among users in different working environments.
6. Two suggestions for improving the charts were mentioned frequently. Forty-seven percent of the respondents felt that the charts should distinguish among knowledge, affective, and skill goals and objectives. Forty-five percent suggested that instructions should be provided on how to use the charts for a variety of purposes.

RD 130 006

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 set of charts (21), 17 by 22 inches	1 set per planning team or 1 set per individual	12.50	Reusable in most instances, consumable if planners write on charts	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

AVAILABILITY

The *CSE Elementary School Hierarchical Objectives Charts* have no copyright and users are encouraged to modify them for local needs. They have been available since 1970 from:

Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 007

CSE/RBS TEST EVALUATIONS: TEST OF HIGHER-ORDER COGNITIVE, AFFECTIVE, AND INTERPERSONAL SKILLS

An evaluation of 2,610 scales measuring skills in the higher order cognitive, affective, and interpersonal areas

The *CSE/RBS Test Evaluations* is a single volume composed of evaluation ratings of 2,610 scales and subscales considered to test skills in the higher order cognitive, affective, and interpersonal areas. The evaluations were originally completed for use by the humanizing learning program of RBS according to a set of taxonomies developed for that program, but they are expected to be of assistance to: (1) Educators in the development and assessment of innovative goals and programs and (2) researchers, psychometricians, and test publishers in identifying areas for which adequate instrumentation does not exist.

Each instrument is categorized into a cell of one of the three taxonomies and is given a numerical rating and grade (good, fair, poor) on each of the following characteristics: Validity, examinee appropriateness (appropriateness for the intended examinee group), normed excellence, teaching feedback, usability, and retest potential. In addition, comments are made on the instrument's ethical propriety. (The CSE acronym for this system is VENTURE.) The first portion of the book is devoted to a discussion of the components of each rating. For example, the system generally gives highest usability ratings to instruments which may be administered to large groups in less than 20 minutes by a single observer without extensive practice.

The instruments are arranged by skill area and subskill and are alphabetically listed within each subskill. Each skill area is introduced by a description of the taxonomy against which the instruments were matched. The cognitive taxonomy is a grid of skill (such as, classifying) against content (such as, verbal-semantic). That of affective domain is three-dimensional: Affective characteristic against type of measure (such as, self-report) against type of report (such as, speculative). The interpersonal taxonomy is four-dimensional with type of relation (such as, with peers) mapped against location (such as, at home) against type of measure against type of report. The instruments are identified by name, form, age range, and the initials of the publisher (or author, in the case of unpublished tests). Indexes of tests and publishers are included.

SUBJECT AREA(S)

The subject area is the educational measurement and evaluation of nontraditional curriculums. Higher order cognitive skills are beyond specific subject-matter knowledge and are necessary for activities like problem solving. Interpersonal or social skills are those abilities needed for effective people-to-people communication and interaction. Affective skills focus on an individual's ability to respond constructively to the impact of environment.

INTENDED USERS AND BENEFICIARIES

The evaluations are expected to be of assistance to educators in the development and assessment of innovative goals and programs and to researchers, psychometricians, and test publishers in identifying areas for which adequate instrumentation does not exist. Tests for all age levels are included.

GOAL(S) OR PURPOSE(S)

The goal of the *CSE/RBS Test Evaluations* is to provide information on the quality and existence of tests in the areas of higher order cognitive, affective, and interpersonal skills.

ASSURANCES AND CLAIMS

CSE claims the test evaluations offer: (1) Conciseness, (2) the most up-to-date and complete collection, (3) educational relevance, (4) objectivity, and (5) consistency.

The taxonomies of the *CSE/RBS Test Evaluations* were generated in the following manner: The principal investigator and staff collected all the attributes of interest to the RBS program. For example, criteria for the higher order cognitive skills were: (1) The skill must be measurable, (2) the skill must be capable of being taught and learned, and (3) the skill must have intellectual and/or societal importance (as decided by RBS). An extensive search was then made for both published and experimental instruments.

Eight raters were employed, ranging in experience from graduate assistants to a Ph.D., in several fields of specialty such as psychological measurement, experimental psychology, measurement and testing, and educational research and design. All raters were trained in the VENTURE system and did preliminary ratings on a sample of tests to resolve differences in interpretation. Each instrument was rated once. However, the most important complex and subjective judgments and those judgments of which the rater was uncertain were checked by at least one other rater. Raters frequently checked procedure and rationale, and each checked consistency in his own ratings.

Individual test evaluations are the focus of the product. CSE, however, included an analysis of the aggregate of tests on each of the VENTURE evaluation criteria which gives fuller information on cell deficiencies to psychometricians and test publishers.

No study of the resource value to educators has been made, but impact studies on two similar CSE products *Preschool/Kindergarten Test Evaluations* and *Elementary School Test Evaluations* indicate that the general idea and format are useful.

DEVELOPER/AUTHOR:

Center for the Study of Evaluation (CSE)
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Research for Better Schools, Inc. (RBS)
1700 Market St.
Philadelphia, Pa. 19103

Ralph Hoepfner, CSE Project Director
Anita Simon, RBS Project Director

AVAILABILITY

No copyright is claimed on the book.

The *CSE/RBS Test Evaluations* was published in 1972 and is available for $8.50. Order from:
Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

CSE-ECRC PRESCHOOL/KINDERGARTEN TEST EVALUATIONS

RD 130 008

Evaluations of the most commonly used measures of school achievement

This book contains evaluations of virtually every output measure published that is generally available to educators and researchers for use in testing preschool and kindergarten students. More than 630 output measures were evaluated by measurement experts and educators using the criteria of measurement validity, examinee appropriateness, administrative usability, and normed technical excellence. The introduction to the book defines and explains the evaluation method. A poor, fair, or good rating is assigned to each of the four main criteria.

The results of the evaluation of each output measure were determined by the purpose that the measure was to serve. Specifically, each measure was classified as to its educational goal, and then its effectiveness in assessing achievement of that goal was evaluated. A wide spectrum of teachers, supervisors, and early childhood specialists was surveyed, and an exhaustive search of both the program and research literature was conducted to select goals for preschool and kindergarten education. The goals were translated into operational definitions and were classified as follows: Affective domain/personality, social skills, motivation for learning, aesthetic appreciation; intellectual domain/cognitive functioning, creativity, memory; psychomotor domain/physical coordination, subject achievement domain/arts and crafts, foreign languages, function and structure of human body, health, mathematics, music, oral language skills, readiness skills, reading and writing, religion, safety, science, and social studies. The book includes an index of goals, test names, and publishers and their addresses.

SUBJECT AREA(S)

Evaluation and educational measurement

Standardized achievement tests in all subject areas are evaluated.

INTENDED USERS AND BENEFICIARIES

Superintendents, principals, testing officers, project directors, and other preschool and kindergarten education personnel are the primary users. Researchers in the field of measurement, test publishers, libraries, and graduate students also purchase and use the books. The ultimate beneficiaries are students in either preschool (30-59 months) or kindergarten (60-72 months) and those who make decisions about education programs for these levels using information from standardized achievement test scores.

GOAL(S) OR PURPOSE(S)

The goal of the *CSE-ECRC Preschool/Kindergarten Test Evaluations* is to provide a critical and objective evaluation of published tests to improve the way tests are selected for use in evaluating preschool and kindergarten programs.

PATTERNS OF USE

The *CSE-ECRC Preschool/Kindergarten Test Evaluations* is a reference tool. Development was initiated on the product because the information contained in the book was needed as part of a systematic procedure for conducting a needs assessment. The book continues to be used as a source of tests keyed to goals which have high priority as determined by a community-based needs assessment. However, the product stands alone, and the developer has packaged the information so that it can be used by a variety of people for a variety of purposes.

Among the secondary uses of the book are: (1) Validation of test selection decisions based on information obtained from other sources, (2) selection of areas for test development by researchers and publishers' research departments, (3) graduate study in education and measurement and early childhood education, and (4) justification of test development where the book indicates that no adequate tests exist.

ASSESSMENT PROVISIONS

Assessment is not appropriate for this noninstructional product.

TIME REQUIREMENTS

Approximately 2 hours are required to read the introductory material and thoroughly examine the product. Only a few minutes are needed to look up a test or goal area.

IMPLEMENTATION PROCEDURES

No special circumstances are needed. The book is extremely easy to use. A notice of the availability of the second edition will be mailed to all purchasers of the first edition to assure that the most current information is being used.

RD 130 008

ASSURANCES AND CLAIMS

If an individual is selecting a test for a particular grade or age level to measure an instructional program's success in teaching a specified educational objective, the *Test Evaluations* book provides simple, easy-to-read, and reliable information on tests that the individual could confidently use to select the best test.

In anticipation of use by evaluation professionals, the developers have included the 25 subratings used to determine the letter grades. The user can attend only to those subratings that are relevant to the particular test selection problem.

Many school districts, particularly those with lower socioeconomic and highly ethnic neighborhoods, are under pressure from teachers and/or parents to abandon testing completely because the tests are felt to be inappropriate for their communities. If one considers that testing has two functions, pupil placement and the measurement of program effectiveness, the abolition of testing can be seen as being potentially beneficial in ending the abuses in pupil placement due to the use of inappropriate and biased tests; but such abolition would inhibit measurement of program effectiveness, thereby inhibiting program improvement and program change. This is particularly true when the test is appropriate (referenced) to the instructional program.

The *CSE-ECRC Preschool/Kindergarten Test Evaluations* clearly indicates that the tests are evaluated for program evaluation purposes; no claims are made that the evaluations are sensitive to racial, ethnic, or other minority groups for individual student placement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CSE-ECRC Preschool/Kindergarten Test Evaluations (book)	1 per administrative entity or library	5.00	Reusable (to be replaced every 3 to 5 yrs. with rev. ed.)	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation

Early Childhood Research Center
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Ralph Hoepfner, CSE Project Director
Carolyn Stern, ECRC Project Director

AVAILABILITY

The *CSE-ECRC Preschool/Kindergarten Test Evaluations* was published in 1971 and is available from:
Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

CSE ELEMENTARY SCHOOL TEST EVALUATIONS

RD 130 009

Evaluations of standardized achievement tests in all elementary school subject areas

This book contains evaluations of virtually every output measure published that is generally available to educators and researchers for use in testing elementary school programs and students. More than 1,000 tests were evaluated by measurement experts and educators using the criteria of measurement validity, examinee appropriateness, administrative usability, and normed technical excellence. The introduction to the book defines and explains the evaluation method. A poor, fair, or good rating is assigned to each of the four criteria; for example, the California Language Test in spelling for the 3d grade is rated poor in measurement validity, fair in examinee appropriateness, good in administrative usability, and poor in normed technical excellence. Each measure was classified by its educational goal and evaluated for its effectiveness in assessing achievement of that goal. The measures were judged on their appropriateness to school situations, not to clinical or research problems. The tests were rated for program evaluation purposes, not for individual student diagnosis.

SUBJECT AREA(S)

Evaluation and educational measurement.

Standardized achievement tests in all elementary school subject areas are evaluated.

INTENDED USERS AND BENEFICIARIES

Superintendents, principals, testing officers, project directors, and other elementary school personnel are the primary users. Researchers in the field of measurement, test publishers, libraries, and graduate students also use the book. The ultimate beneficiaries are students in grades 1, 3, 5, and 6 and those who make decisions about elementary education programs using information from standardized achievement test scores.

GOAL(S) OR PURPOSE(S)

The goal of the *CSE Elementary School Test Evaluations* is to provide a critical and objective evaluation of published tests to improve the way tests are selected for use in the elementary schools.

PATTERNS OF USE

The *CSE Elementary School Test Evaluations* is a reference tool. Development was initiated on the product because the information contained in the book was needed as part of a systematic procedure for conducting a needs assessment. The book continues to be used as a source of tests keyed to goals which have high priority as determined by a community-based needs assessment. However, the product stands alone, and the developer has packaged the information so that it can be used by a variety of people for a variety of purposes.

Among the secondary uses of the book are: (1) Validation of test selection decisions based on information obtained from other sources, (2) selection of areas for test development by researchers and publishers' research departments, (3) graduate study in education and measurement, and (4) justification of test development where the book indicates that no adequate tests exist.

ASSESSMENT PROVISIONS

Assessment is not appropriate for this noninstructional product.

TIME REQUIREMENTS

Approximately 2 hours are required to read the introductory material and thoroughly examine the product. Only a few minutes are needed to look up a test or goal area.

IMPLEMENTATION PROCEDURES

No special facilities or training are needed. The book is extremely easy to use. A notice of the availability of the second edition will be mailed to all purchasers of the first edition to assure that the most current information is being used.

Personnel Required for Product Adoption and Implementation

No special measurement training is required to use the test evaluations. The book is designed for use by educators who do not have the training, time, or other resources to evaluate test instruments.

ASSURANCES AND CLAIMS

If an individual is selecting a test for a particular grade or age level to measure an instructional program's success in teaching a specified educational objective, the *Test Evaluations* book provides simple, easy-to-read, and reliable information on tests that the individual could confidently use to select the best test.

If an individual user had a purpose for using the test evaluations other than for program evaluation, the user might not want to rely on the four letter grades given to each test. In anticipation of such situations, the developers have included the 24 subratings used to determine the letter grades. The user can attend only to those subratings which are relevant to the particular test selection/problem or other purpose for using the information.

Many school districts, particularly those with lower socioeconomic and highly ethnic neighborhoods, are under pressure from teachers and/or parents to abandon testing completely because the tests are felt to be inappropriate for their communities. If one considers that testing has two functions, pupil placement and the measurement of program effectiveness, the abolition of testing can be seen as being potentially beneficial in ending the abuses in pupil placement due to the use of inappropriate and biased tests; but such abolition would inhibit measurement of program effectiveness, thereby inhibiting program improvement and program change. This is particularly true when the test is appropriate (referenced) to the instructional program.

The *CSE Elementary School Test Evaluations* clearly indicates that the tests are evaluated for program evaluation purposes; no claims are made that the evaluations are sensitive to racial, ethnic, or other minority groups for individual pupil placement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CSE Elementary School Test Evaluations (book)	1 per administrative entity or library	5.00	Reusable (to be replaced every 3 to 5 yrs.)	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Ralph Hoepfner, Project Director

AVAILABILITY

A second edition of the book will be available in fall 1975. No copyright is claimed on the published materials.

***CSE Elementary School Test Evaluations* was published in 1970 and is available from:**

Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

INFORMATION CURRENT AS OF MARCH 1975 ■

CSE SECONDARY SCHOOL TEST EVALUATIONS

RD 130 010

A three-volume kit which aids school personnel in the selection of testing measurements relative to school program goals

The three-volume set of *CSE Secondary School Test Evaluations* (grades 7-8, 9-10, 11-12) is aimed at serving the evaluation functions and needs of teachers, administrators, curriculum developers, special project staff, and members of State and Federal education agencies. After conducting a needs assessment and determining that it would be necessary or desirable to assess student standing on some goal, a user may consult the introduction to one of the three volumes (corresponding to the appropriate grade level) to find the goal statement most closely matching the student's need. Then, the student consults the index of goals and finds the evaluation entries for all the tests published and available that can be construed to measure that goal.

Under the individual entries, the user will find the precise name of each instrument, a code indicating its publisher, and ratings on 39 evaluation criteria. These ratings are also summarized into a MEAN score. (MEAN is an acronym for the criteria used to evaluate the tests: measurement validity, examinee appropriateness, administrative usability, and normed technical excellence.) By scanning either the individual or summary ratings, the user can select one or more tests to measure specific goals. Next, the user would consult the index of tests to see whether the evaluations chosen are single units or subtests of larger batteries. In the latter case, the user will have to decide whether the additional information tested will be useful and make trade-offs to obtain the maximum useful information at reasonable cost.

Each of the three volumes in the series has an index of goal categories and test names, test publishers' addresses, and a list of curricular resources. The goals have been arranged under 16 major discipline areas covering most of the outcomes expected of secondary students throughout the country: Arts and crafts, driver and traffic safety, English language arts, foreign languages, health and safety, home economics, industrial arts, intellectual skills, mathematics, music personality characteristics, philosophy and religion, physical education, science, social studies, and vocation/career education.

SUBJECT AREA(S)

Evaluation and educational measurement.

Standardized achievement tests in all secondary school subject areas are evaluated.

INTENDED USERS AND BENEFICIARIES

Superintendents, principals, testing officers, project directors, and other secondary school personnel are the primary users. Researchers in the field of measurement, test publishers, libraries, and graduate students also purchase and use the book. The ultimate beneficiaries are students in grades 7-12, as well as those who make decisions about secondary education programs using information from standardized achievement test scores.

GOAL(S) OR PURPOSE(S)

The goal of the *CSE Secondary School Test Evaluations* is to provide a critical and objective evaluation of published tests to improve the way tests are selected for use in the junior and senior high schools.

PATTERNS OF USE

Development was initiated on the product because the information contained in the book was needed as part of a systematic procedure for conducting a needs assessment. The book continues to be used as a source of tests keyed to goals which have high priority as determined by a community-based needs assessment. However, the product stands alone, and the developer has packaged the information so that it can be used by a variety of people for a variety of purposes.

Among the secondary uses of the book are: (1) Validation of test selection decisions based on information obtained from other sources, (2) selection of areas for test development by researchers and publishers' research departments, (3) graduate study in education and measurement, and (4) justification of test development where the book indicates that no adequate tests exist.

ASSESSMENT PROVISIONS

Assessment is not appropriate for this noninstructional product.

TIME REQUIREMENTS

Approximately 2 hours are required to read the introductory material and thoroughly examine the product. Only a few minutes are needed to look up a test or goal area.

IMPLEMENTATION PROCEDURES

No special facilities or training are needed. The book is extremely easy to use. A notice of the availability of the second edition will be mailed to all purchasers of the first edition to assure that the most current information is being used.

Personnel Required for Product Adoption and Implementation

No special measurement training is required to use the test evaluations. The book is designed for use by educators who do not have the training, time, or other resources to evaluate test instruments.

ASSURANCES AND CLAIMS

If an individual is selecting a test for a particular grade or age level to measure an instructional program's success in teaching a specified educational objective, the test evaluations book provide simple, easy-to-read, and reliable information on tests that the individual could confidently use to select the best test.

If an individual user had a purpose for using the test evaluations other than for program evaluation, the user might not want to rely on the four letter grades given to each test. In anticipation of such situations, the developers have included the 39 subratings used to determine the letter grades. The user can attend only to those subratings which are relevant to the particular test selection/problem or other purpose for using the information.

Many school districts, particularly those with lower socioeconomic and highly ethnic neighborhoods, are under pressure from teachers and/or parents to abandon testing completely because the tests are felt to be inappropriate for their communities. If one considers that testing has two functions, pupil placement and the measurement of program effectiveness, the abolition of testing can be seen as being potentially beneficial in ending the abuses in pupil placement due to the use of inappropriate and biased tests; but such abolition would inhibit measurement of program effectiveness, thereby inhibiting program improvement and program change. This is particularly true when the test is appropriate (referenced) to the instructional program.

The *CSE Secondary School Test Evaluations* clearly indicates that the tests are evaluated for program evaluation purposes; no claims are made that the evaluations are sensitive to racial, ethnic, or other minority groups for individual pupil placement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CSE Secondary School Test Evaluations (1 set of 3 volumes)	1 per administrative entity or library	22.00	Reusable (to be replaced with new ed. every 3 to 5 yrs.)	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Ralph Hoepfner, Project Director

AVAILABILITY

The *CSE Secondary School Test Evaluations* was published in 1974 and is available from:

Dissemination Services
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

A second edition is planned for publication in 1978 (subject to funding). No copyright is claimed on the published material.

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INFORMATION CURRENT AS OF MARCH 1975 ■

CSE ELEMENTARY SCHOOL PROGRAM PLANNING KIT

RD 130 011

Instructional planning materials for elementary school staff

The *CSE Program Planning Kit* is a set of materials to be used by an elementary school staff in order to plan an instructional program for a specified group of students once the need for such a program has been determined.

The kit contains guidebooks for planning team members (teachers and parents), for the planning coordinator (the principal or principal agent), and for the evaluation planner. In addition there are three sourcebooks, one each for a planning strategy based on available materials, objectives, and teaching models. The sourcebooks contain step-by-step procedures for planning a program as well as resources and leader instructions. The planning pad contains forms on which to record decisions and the final program plan.

The materials in the *CSE Program Planning Kit* include guidelines, techniques, and resources for selecting or developing programs to meet important educational goals. Using a previously selected goal of importance as a starting point for planning, the coordinator establishes a favorable atmosphere for planning and selects a planning team. This planning team may use commercially available materials as a basis for its program, adapting it (if necessary) to the goal, to the subject area, and to the needs of pupils and teachers in the school. Or, if such materials cannot be found, the school staff develops a program (using either a teaching model of their own choosing as the basis for the program or deriving objectives and activities for their program goal).

Team planning may occur for programs of many types. Such programs may focus on a single subject such as mathematics or English, or they may emphasize a skill such as critical thinking. They may replace an existing program or they may be an addition to the curriculum. They may involve all the pupils in one or several grades, or they may be designed only for pupils with particular characteristics.

While considering the instruction they want for their pupils, the team members plan for evaluation of that instruction. The evaluation planner guides the team in its discussion of the purpose and design of the evaluation and in its consideration of appropriate methods and measures for assessing pupil progress and program activities.

At the conclusion of the planning process, a school using the kit will have developed a written program plan which describes the instructional component, evaluation component, and management component for an educational program which can then be implemented.

SUBJECT AREA(S)

The subject areas are program planning and educational evaluation.

INTENDED USERS AND BENEFICIARIES

Elementary school principals implement the kit with teams of teachers. Teachers on the planning teams spend the most time with the materials; as an option, parents may be involved in the planning process using the kit. In some districts, district administrative or resource personnel may be involved in the kit's use.

The ultimate beneficiaries are elementary school students who will participate in well-planned instructional programs. The kit may benefit preschool and secondary students although its primary audience is the elementary school.

GOAL(S) OR PURPOSE(S)

Using the *CSE Program Planning Kit*, the principal of an elementary school should be able to write a program plan which includes: A description of the proposed instruction (i.e., program goal, objectives, activities, and schedule); the proposed management system (i.e., task/time line for program implementation and budget); and the proposed evaluation (i.e., purpose, instruments, schedule), assisted in this task by a planning team of teachers, parents, and an individual who assumes the role of evaluation planner.

The principal of an elementary school should acquire the knowledge, skills, and attitudes needed to assist teachers who are implementing a program according to a program plan and who will participate in and benefit from an evaluation of that program.

PATTERNS OF USE

Program planning as defined by the kit is different from preparing for tomorrow's class or even next week's class. It requires planning the more general, longer range structure for teaching and learning. It means figuring out the goals which pupils should achieve as the result of spending time in a program. It means describing the knowledges, skills, and attitudes that pupils will acquire. It means developing or selecting the learning activities in which pupils will engage and describing the setting and the materials with which they will work.

Programs may be of many types; they may be short or long, require a little time or a lot, focus on a single subject matter or emphasize a process utilizing the content from many subject areas, replace an existing program or be additions to the curriculum, involve all the pupils in one or several grades, or they may be designed for pupils with particular characteristics. For example, the following are all possible programs: Once-a-month assemblies whose goal is that pupils will become aware of the many forms of dance; twice-a-week small-group discussions for the purpose of helping pupils learn how to set realistic goals for themselves and plan for the achievement of these goals; an individualized reading program every day for 1 hour during which children will improve their decoding, comprehension, and study skills.

These programs are different from one another, but common to them all is the fact that they describe a coordinated and comprehensive set of activities and materials intended to help pupils achieve knowledge, skill, and/or attitude objectives.

The *Program Planning Kit* may be used as a one-shot, short-term planning effort at one grade level in a single school or as part of a more comprehensive evaluation scheme for a district. In either instance, a planning team using the kit chooses from one of three planning strategies—objectives-based, teaching models, or materials-based—and uses the materials within the kit specific to that strategy to produce their written program plan.

A forthcoming report will discuss patterns of use during the kit's national field test.

ASSESSMENT PROVISIONS

The kit focuses on a "learn-how-to-do-it" basis rather than "learn it." Assessment of the kit's success will be made based on the degree to which a planning process is implemented within a school and the existence and quality of written program plans resulting from the planning process.

TIME REQUIREMENTS

The time required for the program planning process varies according to the complexity and length of the program being planned as well as the experience of the planning team in working together and making program planning decisions. A 2-week unit may be planned in a few hours; the kit developers estimate that up to 50 hours of team time may be required to plan a semester-long program. The amount of time required of the coordinator and the evaluation planner is more difficult to estimate as it depends upon the extent to which each chooses to become involved in the planning process.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are needed. The extent of organizational change required varies depending upon the degree to which the instructional staff has been previously involved in planning activities. For example, teacher release time during the day (either through the use of substitutes or early dismissal) or reimbursement for after-hours planning seems to be an important facilitator for planning efforts.

Special user considerations include the necessity for prior articulation of a goal for planning where improvement of an existing program or a new program is needed and a decision concerning the degree of nonteacher (parent) participation in the planning process.

Summary Cost Information

Cost of materials and its final format will be determined during the last half of 1975. Components of the product may be combined if cost exceeds benefit. The designated publisher is working with the developer toward the most cost-effective package.

Personnel Required for Product Adoption and Implementation

No special personnel or training is required. Time of elementary school principal and (possible released) time of two to six teachers is required for 2-50 hours. This might necessitate replacement of teachers in classrooms. Community (parent) involvement is an optional feature. Their time would be equal to or less than teacher time.

ASSURANCES AND CLAIMS

The developer believes that systematic planning of both programs and their evaluations is the best method of assuring that the offerings of the schools are addressing the needs of the communities they serve. The current emphasis on evaluation in education requires each school to account for both the content and the quality of its programs. Each of the kits in the *CSE Elementary School Evaluation Kit* series is offered to assist the schools in an important stage of this accountability process.

In particular, the *CSE Program Planning Kit* was developed with certain assumptions: (1) Schools often have need for programs planned at the local school level; (2) school personnel are capable of assuming the major responsibility for some of their own program planning. Planning skills exist or can be acquired by those within the school, supplemented by outside assistance where necessary; (3) successful school level planning requires the commitment of many people—the principal, teachers, parents, district personnel—and a division of responsibility among them; (4) there is no single correct way to do program planning—schools must find their own methods in accordance with general principles of planning, although guidance can be provided by written materials such as the CSE kit; (5) planning for the evaluation and management of instruction should occur concurrently with planning for instruction; and (6) school level program planning should not be viewed as a one-shot effort to produce a single written program plan but as part of a systematic effort to improve the quality of instruction (as with any innovation, the program planning process should be introduced with care and should become part of the normal functioning of the school).

A report will be issued during fall 1975 which will analyze the effects of the kit on school planning.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CSE Elementary School Program Planning Kit containing 1 each:	1 set per team	Not determined	Reusable except for planning pad	
Guidebook for planning team				
Guidebook for coordinator				
Guidebook for evaluation planner				
Sourcebook for materials-based strategy				
Sourcebook for objectives-based strategy				
Sourcebook for teaching-models strategy				
Planning pad			Consumable for each planning process	

DEVELOPER/AUTHOR:

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90024

Adrianne Bank, Project Director

AVAILABILITY

Final publication ready drafts of the revised CSE kit materials are nearing completion. Allyn & Bacon, Inc., of Boston have the right of first refusal to publish the kit. Request for proposals will be issued to all interested publishers if Allyn & Bacon does not choose to publish the materials. A developmental copyright was claimed on the materials in 1973. A 5- or 10-year limited copyright will be filed upon publication. A set of awareness materials including an orientation cassette tape presentation has been developed for the kit. Availability is dependent on cost-effectiveness studies. For information contact:

Adrianne Bank
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, Calif. 90025

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 012

DEVELOPMENT, DISSEMINATION, AND EVALUATION (DD&E) ASSESSMENT BATTERY

A model assessment system for compentence-based professional training

Although this assessment battery was designed for use with the Far West DD&E functional competence training program, it has a more general utility as a model assessment system for competence-based professional training programs and as a flexible and adaptable set of assessment instruments that may be employed in any competence-based curriculum whose content includes educational product development and evaluation. The assessment system is designed to aid both student and instructor in: (1) Program planning, (2) progress monitoring, and (3) exit assessment. Four types of assessment methods are employed: Competence ratings, knowledge tests, job-sample tests, and product ratings.

SUBJECT AREA(S)

The assessment system focuses primarily on the content areas of educational product development, dissemination, and evaluation. The competencies cover a broad range of levels of professionalization but are most appropriate for entry-professional (master's degree) preservice and inservice training programs. Primary attention is given to "orientation" and "familiarization" levels of knowledge and general procedural skills associated with the planning, design, development, tryout and revision, and evaluation and dissemination of educational products and programs. Much of the content has been derived from analysis of the competencies required to perform the kinds of tasks *actually assigned* to entry-level (M.A. degree) professionals. Explicitly excluded are competencies associated with educational research, systems analysis, job and task analysis, sequencing of instruction, and the management of research and development. These areas have been excluded, not because they are unimportant, but because tasks requiring these competencies are usually assigned to more experienced or advanced (e.g., doctoral level) professionals.

INTENDED USERS AND BENEFICIARIES

The DD&E assessment system may be useful to any decisionmaker (student, instructor, employer, employee) who is concerned with "personnel development"; that is, with counseling, guidance, training, job assignment, on-the-job training, cross-training, and the like, in the field of social science research and development. Although specifically targeted to the area of educational product DD&E at the professional entry level, the DD&E materials have actually been used in community colleges, baccalaureate, master's, and doctoral level programs and in a variety of inservice training applications. With some modification in content examples, the assessment system may be adapted to a wide variety of health, social, business, and industrial settings, other than those specifically concerned with education, where knowledge and skills in systematic, "knowledge-based" development of social or behavior products, programs, or systems are involved.

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The DD&E assessment battery "model" may be of interest to anyone concenred with competence-based or performance-based education.

GOAL(S) OR PURPOSE(S)

The purpose of this assessment system is to provide students, instructors, and employers with a practical, validated means for assessing those competencies in educational product development, dissemination, and evaluation which are commonly required in the performance of tasks assigned to entry-level professionals.

PATTERNS OF USE

Concerns for costs and practical use lead the developers to a sequential, decision-oriented strategy in which less expensive devices such as self-ratings are used most extensively, but with cross-checking provided against more expensive sources of information such as knowledge tests and job samples. In the earlier stages of a competence-based training program the emphasis is primarily on program planning, guidance, and counseling. As the student progresses, the emphasis tends to shift to concerns about completion of modules, attainment of objectives, credit for attainment, and competence certification. Comparable data and sometimes identical or parallel test items and instruments may be used for both the diagnostic and assessment uses.

A student's file is "opened" by recording pertinent biographic, academic, and work-experience data from the student's application form. This may be augmented by instuctor interview data. The first structured instrument the student encounters is the DD&E diagnostic instrument (available as a Q-sort or a rating list) which consists of self-rating items which have been designed to reveal a competence profile on the three DD&E functional contexts (development, dissemination, and evaluation) and on six process skills (analyzing, planning, producing, evaluating, collecting and organizing information, and communicating). On the basis of this information taken together (employing a sequential, Bayesian, item sampling strategy), the instructor may decide to probe areas where further information is needed—perhaps because the student's selfappraisals in those areas suggest discrepancies in either being higher or lower than expected. The least expensive alternatives available are interviews, use of a second tailored Q-sort drawn from the rating item pool, or use of one or more of the module pretests. In some instances, supervisors' ratings, job samples, or product ratings may be available. However, their use in diagnostic situations would be unusual.

As students progress through the program they may encounter up to 20 end-of-module knowledge tests. The students may also produce a variety of ratable products as part of application projects. In some instances, they may have an internship where a valid job supervisor rating can be obtained. At the end of the program this cumulative file of information can be augmented by a third self-rating. Because of the flexible item sampling format, this third self-rating may be tailored to probe areas corresponding to the student's own program objectives. When relevant, supervisor or instructor ratings may also be obtained. Finally, for those students who have completed the development series, a knowledge test and a job sample (simulation) test, validated and calibrated on a representative sample of DD&E students and practitioners, are available for end-of-program assessment.

ASSESSMENT PROVISION

See "Patterns of Use."

TIME REQUIREMENTS

The DD&E diagnostic instrument is self-administering and may be completed in less than 1/2 hour. Completion of the individual module tests usually requires between 1/2 and 1 hour. The DD&E product development assessment battery (self-rating, knowledge test, and simulation test) requires approximately 4 hours.

IMPLEMENTATION PROCEDURES

All instruments in the *DD&E Assessment Battery* have been designed for self-administration. The assistance of an instructor who is familiar with the content of the *DD&E Assessment Battery* and the availability of appropriate instructional resources (e.g., those of the DD&E functional competence program) is needed to provide the student with guidance and to assess and certify attainment of competence. A manual is provided which has been designed to aid the instructor in implementing and adopting the system.

Personnel Required for Product Adoption and Implementation

One instructor who is familiar with the administration, scoring, interpretation and use of the assessment battery is required. Thorough studying of the manual, followed by self-administering and scoring each instrument, as well as administering and scoring a trial run of all the instruments for a few students will familiarize the instructor with the battery. The instructions and examples for the scoring of the knowledge test and the simulation presume that the instructor has at least modest knowledge and experience in educational product development.

ASSURANCES AND CLAIMS

Assurances

By June 1975, this product will have completed three complete cycles of development, test, and revision, involving more than 100 test subjects who were either enrolled in training programs or employed in research and development agencies located throughout the United States. The materials have also been examined and critiqued by a wide variety of trainers, employers, and other experts with regard to their content, method, utility, and validity. It has been demonstrated, in a variety of preservice and inservice settings, that the assessment system is functionally useful and that it has both validity and utility when used as directed. It is noted that the instruments are provided as *aids* for a decision process that must be inherently judgmental. The student and instructor are provided with a basic set of criterion-referenced assessment items, systematic procedures for organizing and interpreting the infromation gained from these items, validation data regarding the instruments, and instructions for adapting the system to local program requirements; a foundation can thus be established for more effective, individual decisions regarding competence attainment.

The materials do not appear to display any intended form of social bias, including ethnic or sexual sterotyping; however, the simulation does deal with subject matter which has been explicitly chosen to treat product evaluation situations where the student's sensitivity to ethnic, sexual, or other social conditions may (or may not) be manifested. Hence, there may be an opportunity for the instructor to gauge the general level of social awareness and sensitivity of students in dealing with issues regarding the appropriateness of product development and evaluation content and process.

Claims

The information gained from these items, validation data

A definitive statement of claims for this product cannot be made until field testing is completed in June 1975. Data in hand at the date of this report indicate that all instruments are practically useful discriminations among groups of subjects with known differences in levels of DD&E training and experience. Moreover, comments by test subjects, instructors, and employers have been preponderantly favorable regarding the usefulness and value of the instrument. The only major complaints have dealt with time required to take the tests and omission of desired content. (For development and validation testing purposes, the entire battery has been administered at one time. Since this will not be the case in actual operational use, there should be fewer complaints regarding time requirements.) The omission of desired content; e.g., instructional strategies for design of curriculum materials, is lamentable, but can be dealt with if users are willing to add their own content to this deliberately "open" assessment system.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Product development simulation kit	1 per 10 students	To be announced	Reusable	
Manual and set of instrument masters	1 per program	To be announced	Reusable	
Diagnostic Q-sort	1 deck per 5 students	*	Reusable	
or diagnostic instrument	1 per student			
Diagnostic recording form	1 per student	*	Consumable yearly	
Module tests	1 per 10 students	**	Consumable yearly	
Product development, self-rating	1 per student	*	Consumable yearly	
Product development knowledge test	1 per 10 students	*	Reusable	

*Locally reproduced from the set of instrument masters.

**Module tests are included in the set of modules (listed in the DD&E functional competence program description).

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Paul D. Hood

AVAILABILITY

The *DD&E Assessment Battery* will be available August 1975 from:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103
Copyright is pending.

INFORMATION CURRENT AS OF MARCH 1975 ■

EVALUATION FOR PROGRAM IMPROVEMENT

RD 130 013

Training materials for school personnel concerned with providing educational opportunities for children

Evaluation for Program Improvement is one of six sets of training materials developed to increase the skill, knowledge, and understanding of school personnel in the area of instructional planning and management. The goal of this unit is to help school staff develop an understanding of the knowledge and skills necessary to identify, collect, organize, transpose, and analyze information useful in making decisions about program modification.

This unit is designed to be used in five sessions of 3 hours each. Much of the unit is based on an actual evaluation project and is presented in the form of simulation exercises involving role playing. The unit is divided into five parts. Session I, "Introduction to Program Evaluation," surveys evaluation in general and program evaluation in particular. Sessions II, III, and IV ask the participants to group themselves in teams and, through role playing, simulate the activities of an evaluation committee faced with the problems encountered on an actual evaluation project. In Session V, participants use their experience in the simulations to analyze the actual evaluation design and report. Accompanying each session is an annotated bibliography for participants who want to learn more about the area covered.

SUBJECT AREA(S)

The general subject area of this unit is instructional planning—that area of educational administration concerned with providing educational opportunities for children. More specifically, this unit is concerned with the design and implementation of instructional programs. Five separate but related topics are dealt with, one in each session:

1. Identifying the necessary and feasible decisions to be made about program modification and specifying who makes these decisions.
2. Identifying alternative courses of action in instructional management.
3. Determining which information is necessary to modify decisions.
4. Taking responsibility for or contributing to a plan for collecting, organizing and analyzing program modification information.
5. Analyzing and reporting information.

INTENDED USERS AND BENEFICIARIES

The unit is designed for school personnel responsible for deciding whether and how an instructional program should be altered to make it more effective. Specific role titles will vary from district to district, but will probably include building principals, department heads, district curriculum specialists, and teachers serving on curriculum committees. The unit may also be useful to district office administrators other than those with direct curriculum responsibilities, board of education members, parents, and students. The intended user group can best be defined by function and interest rather than by a particular role or title.

GOAL(S) OR PURPOSE(S)

The goal of this unit is to help instructional program managers develop the knowledge or skills necessary to identify, collect, organize, and analyze useful information in making decisions about program modification. A further goal is to bring about an understanding of the process of program evaluation and how it relates to specific roles in the school community.

PATTERNS OF USE

The unit consists of five self-contained sessions of 3 hours each, which can be arranged in various ways. Possibilities include:

1. Five weeks—1 session per week.
2. Five days—1 session per day.
3. One weekend—session I on Friday night, sessions II and III on Saturday, sessions IV and V on Sunday.

The order of the sessions should not be rearranged. The activities and exercises within each session have suggested time allocations so that the session may be completed in approximately 3 hours.

ASSESSMENT PROVISIONS

Much of the unit is based on an actual evaluation project presented in the form of simulation exercises involving role playing. After each simulation exercise, the participants discuss what occurred in the meeting of their evaluation team. They then look at feedback—a description of what took place in the actual evaluation project at this stage. Thus, the participants are frequently able to measure their progress and understanding against an actual situation.

TIME REQUIREMENTS

The unit consists of five sessions of 3 hours each. The coordinator and the participants can arrange the grouping of the sessions to suit their own needs. The reading assignments that are required for participation in the sessions are not included in the 15 hours, nor is any additional reading. It may take the unit coordinator 2 or 3 days to become familiar with the material prior to first use.

IMPLEMENTATION PROCEDURES

The coordinator of the unit need not be an evaluation-of-measurement specialist, but will find it helpful to read the material in the annotated bibliography prior to the workshop. Arrangements for substitutes, released time, and schedules, may be necessary; and ample time should be allowed for those to be made, probably at least a month. No special equipment is required.

Personnel Required for Product Adoption and Implementation

The unit requires a coordinator who has an active role as an organizer and, to a lesser extent, as a discussion leader. Any background in educational evaluation or any knowledge of role playing and simulation will be beneficial, but the unit is designed so that a person with minimal knowledge in these areas can lead the sessions and learn with the participants. The unit requires at least 7 participants and becomes unworkable with more than 30.

ASSURANCES AND CLAIMS

The information that has been obtained about this unit indicates that it is effective as material for training. Specialists in evaluation reviewed the material and responded favorably to six questions posed by the program staff. A total of 64 participants used all or parts of the materials in 4 field test sites. Approximately one-third were teachers and a little more than one-half were principals or other administrators; five were school counselors. Thirty-nine of these participants responded to overall judgment questions at the conclusion of the workshop. Of these, 80 percent said they had learned what they had expected from the workshop, 10 percent said they had not gotten what they expected, and 10 percent said they had mixed reactions. No one has reported that the unit is physically, psychologically, or sociologically harmful. The material does not appear to display any social, ethnic, or sexual bias or stereotyping. This assurance is derived from a careful reading of the unit. The receipt of an unsolicited field test report from Alaska indicates that the unit is easily replicable and transportable.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Coordinator's handbook (transparencies, filmstrip, cassette tape)	1 per group	34.95	Reusable	
Participant's handbook	1 per participant	7.95	Each time unit is used	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Earl Mortensen
Diana P. Studebaker
Enoch I. Sawin, San Francisco State University
Richard P. Watkins

AVAILABILITY

Evaluation for Program Improvement **is currently available from the developer/author:**

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 014

PUPIL-PERCEIVED NEEDS ASSESSMENT PACKAGE

A multimedia package to aid in the design and implementation of an assessment of school needs as perceived by pupils

Pupil-Perceived Needs Assessment guides administrators, teachers, and other school personnel in the systematic collection of data on how students feel about school curriculums and other school program activities. This is accomplished primarily through the design, administration, and analysis of a pupil-perceived needs indicator. The indicator is an open-ended and/or rating-scale instrument used to obtain data from students that will be useful in assisting a school or district to identify problems and establish priorities for planning or remedial efforts.

Data collection on pupil-perceived needs can be used to make the classroom teacher sensitive to the needs of pupils, to inform the school principal about problems which can be corrected at the building level, and to provide administrators with information they can use to make decisions on districtwide improvement efforts.

The product consists of five individually bound units and a supplement for sampling. A cassette tape introduces the product to the user. The first unit is directed to the person who has overall responsibility for the assessment effort. The four remaining units deal with developing an indicator to use in collecting information from pupils, administering the indicator to pupils, processing the data, and analyzing the results. Worksheets, exercises, checklists, and information sheets help participants plan and implement an assessment appropriate to their own school or district.

The product is suitable for either individual or group use. If the needs-assessment project is to be a group effort, one person should be designated project manager.

SUBJECT AREA(S)

Evaluation, administrative planning.

The product emphasizes the knowledge and skills necessary to plan, conduct, and report an assessment of school needs as perceived by pupils. These skills allow the user to develop an indicator to use in collecting information from pupils, administer the indicator to pupils, and analyze and interpret results.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by superintendents, assistant superintendents, building principals, curriculum or evaluation specialists, and teachers.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable school administrators and teachers at the district or building level to plan, conduct, and report an assessment of school needs as perceived by the school pupils. It provides school staff with the knowledge and skills necessary to perform the specific tasks of such a project.

PATTERNS OF USE

The material is self-contained and requires no specially trained individual for use. It can be used by an individual or small group.

The material is divided into units paralleling the major tasks of a pupil-perceived needs-assessment project and should be used sequentially. The worksheets and information sheets in each unit allow the users to conduct their own assessment project as they work through the material.

ASSESSMENT PROVISIONS

Users are guided by checklists and information sheets in carrying out project tasks.

TIME REQUIREMENTS

The time required to study and use the materials is approximately 8 hours. The length of an assessment project will vary depending upon the scope and depth of the assessment desired by the user.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a district to use the product, whether at the district, building, or classroom level. Although it can be used by one person working alone, it is recommended that a group of five to eight people work together. It is helpful if one member of the group is knowledgeable in interpreting evaluation data.

No external assistance of special equipment is necessary. Data can be analyzed manually or by computer, depending on the scope of the assessment and the computer service available.

RD 130 014

Summary Cost Information

If a district or school committee of five members was to conduct the project, each should have a copy of the product resulting in a total cost up to $125. Users may want to order different quantities of each of the several units in the package depending upon the number of people working on each of the tasks in their assessment project. Prices are available from the developer.

Personnel Required for Product Adoption and Implementation

The product can be used by a single individual or small group (five to eight recommended). No previous experience in pupil-perceived-needs assessment is required. The services of an evaluator can be helpful. Consultation and other services are available from the developer at various costs.

ASSURANCES AND CLAIMS

The subject of the product is the management or conduct of a pupil-perceived needs assessment project. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Users have not brought any incidences of bias to the attention of the developer.

Preliminary evaluation of the product involving school personnel of varied training and experience from several different school districts indicates that the product can be generalized and transported. Further evaluation will address this issue in greater detail.

MATERIALS AND EQUIPMENT

Required Item	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different fron Distributor
PPNA package	1 per user	25.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The product has been completed and field tested. Order from:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 015

PUPIL ASSESSMENT SYSTEM

Instruments to assess six dimensions of elementary and junior high school student achievement, attitudinal, and behavioral development

The *Pupil Assessment System* is designed to assess six dimensions of elementary and junior high school student development: (1) Academic skills, (2) attitudes toward school and learning, (3) self-esteem, (4) coping skills, (5) emotional adjustment, and (6) achievement orientation and behavior. Use of the entire battery of questionnaires and tests allows the user to determine simultaneously these six aspects of student growth and derive a multidimensional learning needs profile for a single pupil or for groups of pupils. Such profile assessments should prove useful to school psychologists, counselors, and other school personnel knowledgeable in the administration and interpretation of psychological and educational tests, because the tests provide an economical means of detecting the pupils' academic, attitudinal, and emotional troubles.

The system is designed for two major uses: (1) As a screening device which can be administered to large groups of pupils and (2) as a prepost battery to measure, simultaneously, gains or losses on these six aspects of development, over a school year. Children identified through the *Pupil Assessment System* as having "problem" profiles can subsequently be tested and interviewed more intensively by trained school personnel. Appropriate remedial and therapeutic actions may then be recommended. In addition, if the *Teacher Assessment System* (which is also available from the center) is used in conjunction with the *Pupil Assessment System*, more effective teacher-pupil assignments can be made by matching the characteristics and needs of the pupils and teachers. For the evaluation of a student's academic skills, the developers employ the series of achievement tests which comprise McGraw-Hill's comprehensive tests of basic skills (Form S). A center-modified version of the schools sentiment index (instructional objectives exchange, University of California, Los Angeles, California) and the student sentence completion form, which was developed at the center, yield information concerning pupils' attitudes toward school and learning. In order to measure the level of self-esteem, the developers recommend the use of the Piers-Harris children's self-concept scale (counselor recordings and tests, Nashville, Tennessee), with modifications suggested by center research.

A child's skills and overall effectiveness in coping with the demands of school, parents, and others are estimated by scores on the student sentence completion form. For the assessment of emotional adjustment and mental health, the peer behavior rating system is employed. The peer behavior rating system was developed by personnel of the center beginning in 1965, and is based on the technique of having a panel of 10 of a child's peers rate the child on a series of behavioral dimensions which are relevant to different areas, e.g., school adjustment, interpersonal relations. The peer behavior rating system also yields a measure of a pupil's achievement orientation and behavior, as viewed by the pupil's age-mates.

In summary, the *Pupil Assessment System* furnishes a composite picture of the major needs and strengths of pupils across a variety of cognitive, emotional, and behavioral domains. It can be used for individual guidance and program planning. It can also be used to identify the most urgent needs of specified groups of students, such as minority children, those from high- or low-income families, those with low or high aptitudes, and those with physical handicaps.

SUBJECT AREA(S)

Subject areas are evaluation and counseling.

The *Pupil Assessment System* can be used to determine the "learning needs profile" for a student in any specific subject area, such as science, or for all subject areas.

INTENDED USERS AND BENEFICIARIES

The *Pupil Assessment System* is intended for use by school personnel specialists, school psychologists, counselors, and—to a lesser degree—teachers. Proper administration and interpretation of the *Pupil Assessment*

System profile can aid in diagnosing learning and emotional needs of students, in counseling them, and in assigning them to various remedial programs. The direct beneficiaries are the pupils themselves. However, appropriate assessment and meeting of pupils' learning needs benefit the school system and larger community. Because most of the validation research was conducted with samples of school children in grades 4 through 9, users should be particularly cautious interpreting profiles of children below the 4th grade.

GOAL(S) OR PURPOSE(S)

The purposes of the *Pupil Assessment System* are: (1) To assess the level of a student's development in academic skills, attitudes toward school and learning, self-esteem, coping skills, emotional adjustment and achievement orientation, and behavior; (2) to allow a diagnosis of the multidimensional learning needs of an individual pupil, or of a group of similar pupils; (3) to serve as a screening device which can be utilized on a large scale for the purpose of identifying pupils who may have learning or emotional difficulties which require more intensive examination; and (4) to identify students who differ in learning styles so that they may be more effectively taught.

PATTERNS OF USE

The *Pupil Assessment System* battery of tests can be administered to elementary and junior high school pupils individually or in large groups. The component instruments of the battery can be used concurrently during one session or administered separately during several sessions. All testing should be conducted by someone who is knowledgeable about educational tests and measurement.

ASSESSMENT PROVISIONS

A user's manual, available from the center in November 1975, describes procedures which the user can undertake to determine how adequately the battery of tests identifies pupils with learning and emotional difficulties in that specific school system. In addition, techniques are presented for gaging the reliability and validity of the *Pupil Assessment System* for the specific purposes of the user.

TIME REQUIREMENTS

The administration of the complete battery of tests and questionnaires requires from 2 to 5 hours, depending upon such factors as the number of achievement tests given and the grade level of the pupils. Pupils should not be tested more frequently than twice during the School year; i.e., once at the beginning of the year and once at the end of the year. It is recommended that testing be broken into three intervals of approximately equal length; e.g., 40 to 60 minutes. The amount of time required for scoring the tests will vary according to the number of tests administered and the availability of machine-scoring facilities or funds.

Users may incur additional costs if they elect to send completed tests and answer sheets to the publishers for scoring.

The *Pupil Assessment System* should be scored and interpreted by specialists in the fields of educational counseling and testing. If persons with these skills are not employed by the school, they should be brought in as consultants.

ASSURANCES AND CLAIMS

Assurances

An assurance of harmlessness of the *Pupil Assessment System* is made by the developers. Various versions of the instruments which comprise the battery have been administered to many thousands of pupils during recent years. Pupils or their parents reacted negatively to the tests in fewer than 20 instances out of more than 15,000 testings.

There is no known bias in the *Pupil Assessment System*. It is assured that the tests do not perpetuate sexism, racism, or other biases relating to religion, age, or socioeconomic stereotypes.

The system will be replicable and transportable by November 1975.

Claims

The *Pupil Assessment System* and its constituent elements were carefully developed following standard criteria for the construction and use of psychological and educational tests. Preliminary data indicate that the system possesses adequate psychometric reliability and validity. There is evidence that pupils who are experiencing learning and emotional difficulties can be identified by their "Learning Needs Profiles." Additional evidence will be provided to potential users as it becomes available.

The development of the *Pupil Assessment System* has been carried out by doctorate-level staff of the Research and Development Center who have been specifically trained in the area of psychological and educational assessment, personality development, and cognitive growth. Work on the student sentence completion form and the peer behavior rating form, both of which have gone through several versions, has been in progress since 1965. Current forms of the tests have reliabilities which range from 0.52 to 0.78, with a median value of 0.71. Correlations of the coping, emotional adjustment, and achievement orientation scores with pupil academic gains and teacher ratings of achievement and adjustment offer support to validity of these scales. A large-scale study is currently underway and will provide much additional data on the *Pupil Assessment System*. Results will be made available in fall 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Comprehensive tests of basic skills	1 per pupil	31.50 per 500 answer sheets	Reusable test booklet	McGraw-Hill, Monterey, Calif.
School sentiment index (modified)	1 per pupil	18.30 per 1000 answer sheets	Reusable test booklet	Instructional Objectives Exchange, Los Angeles, Calif.
Piers-Harris children's self-concept scale	1 per pupil	5.16 per 500 answer sheets	Reusable test booklet	Counselor Recordings and Tests, Nashville, Tenn.
Student sentence completion form	1 per pupil	To be announced	1 per pupil	
Peer behavior rating system	10 per pupil	To be announced	1 per pupil	
Pupil assessment system manual	1 per school	To be announced	Reusable until revised	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
Education Annex 3.203-B
University of Texas at Austin
Austin, Tex. 78712

Robert Peck, Codirector
Noel Dunivant, Assistant Project Director

AVAILABILITY

The comprehensive tests of basic skills, the school sentiment index, and the Piers-Harris children's self-concept scale are currently available from the respective publishers. Minor modifications in the last two are described in the system user's manual.

The student sentence completion form, the peer behavior rating system, and the user's manual exist in prepublication form only at this time. Copies will be available for distribution in November 1975 from:

Research and Development Center for Teacher Education
Education Annex 3.203-B
University of Texas at Austin
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 016

HANDBOOK OF COMPREHENSIVE PLANNING IN SCHOOLS

A handbook designed to assist administrators in collecting data on the results of the instructional process rather than to test students in the traditional sense

The *Handbook of Comprehensive Planning in Schools* helps school personnel define districtwide curriculum objectives and assess specific school programs in terms of those objectives through the use of student performance indicators. The purpose of the indicators is not to test students, but rather to assist administrators in collecting data on the results of the instructional process. School personnel are then able to recommend where specific curriculum improvements should be made.

The handbook's content includes the writing of planning objectives and assigning priorities to them, developing student performance indicators, identifying the function of program structure in school district planning, collecting and using data from performance indicators for program planning, and managing the use of performance indicators in a school district.

The unique features of the handbook are that: (1) It employs a total school district focus; (2) it provides a generic approach that can be used with any curriculum program; (3) it includes instructions and checklists for the manager of the planning effort; (4) it provides for the integration of results across many curriculum areas and student ages; and (5) it focuses on the accomplishments of classrooms, buildings, and school districts.

Users work together as a five- to eight-member planning committee using the handbook's exercises and group activities. In this manner, the committee completes its planning effort as it uses the handbook under the direction of the committee leader or project manager.

SUBJECT AREA(S)

Curriculum planning.

The handbook emphasizes writing planning objectives, developing performance indicators, using the results derived from the indicators to recommend where specific curriculum improvements should be made, and managing the overall effort.

INTENDED USERS AND BENEFICIARIES

The handbook is designed for use by central office administrators, curriculum specialists, building principals, and teachers working together as a five- to eight-member planning committee.

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school districts obtain student performance data that can be used in the determination of where curriculum improvements need to be made. The major objectives are: (1) To specify planning objectives, (2) to ascertain the extent to which current curriculum programs contribute to the attainment of these objectives, and (3) to recommend where curriculum improvements should be made.

PATTERNS OF USE

The handbook is designed for use by a small group, but it can be used by an individual. Users proceed sequentially through the materials, first learning how to do the suggested procedures and then actually doing them for their district's planning efforts, using worksheets provided in the materials. In this manner, the handbook facilitates the group performance of the several tasks in the planning effort.

Although the handbook is self-contained, users may choose to obtain outside consultation or help in their planning effort from the developers. School districts have used the product with and without assistance.

ASSESSMENT PROVISIONS

A series of checklists is included in the handbook so that the project manager can monitor each task in the planning effort.

TIME REQUIREMENTS

Using the handbook, it takes approximately 2 weeks to initiate the planning effort in a school district. The time period, however, may vary with the extent of the school district's comprehensive planning project.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required to assist the users. However, district personnel should meet the following broad criteria if a planning project is to be carried out successfully: (1) District administrators should be committed to supporting the planning project for several years and should be willing to supply the financial support required to sustain the effort; (2) widespread staff involvement should be encouraged in planning and decisionmaking, although participation should be on a voluntary basis; and (3) those involved in the project should be made aware of the philosophy upon which comprehensive planning is based; i.e., that the people directly concerned with specific activities should share in the decisionmaking processes related to those activities.

Summary Cost Information

If a district chooses, for example, to work with a committee of six staff members, then the initial year cost for materials would be approximately $60. The district may have to pay its personnel for time spent on the planning effort. The handbook helps the district determine the cost based upon the size and duration of the effort and the rate of staff pay. Subsequent-year costs are the same as the initial-year costs. Computer processing of pupil data is estimated at less than $0.60 per pupil per year.

Personnel Required for Product Adoption and Implementation

The handbook can be used by a committee of five to eight district staff members without any previous training in comprehensive planning. Districts can choose, however, to obtain consultation and other services from the developer as they move through their planning effort. Costs for different services can be obtained from the developer.

ASSURANCES AND CLAIMS

Assurances

The handbook facilitates the involvement of several district staff members in a planning effort aimed at program improvement. This emphasis and specific procedures incorporated in the product minimize the threat of using results for personnel assessment. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Although the developer has striven for social fairness in writing the material, no formal analysis of wording or examples has been conducted.

The product has been used in medium-size urban school systems and large and small suburban districts in different curricular areas. These users were able to write planning objectives, develop indicators of student performance, and use the data resulting from the indicators to identify curriculum improvement needs without the assistance of the developer.

Claims

Using the product, school district staff can write planning objectives, develop performance indicators, and apply the data resulting from the indicators to identify curriculum improvement needs. This can be done by staff working together across grade levels and content areas. This claim is supported by data derived from formative evaluations conducted at different stages of product development.

During the period 1970-73, the product underwent careful development involving the steps of analysis and conceptualization, design, construction, pilot test and revision, and field test and final revision. Local school districts involved in pilot and field test activities provided important feedback for revision and improvement.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Handbook of Comprehensive Planning in Schools	1 per user	9.95	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The development of the handbook is complete and has been printed by Educational Technology Publications (January 1975). It is currently available from the distributor:

Educational Technology Publications
140 Sylvan Ave.
Englewood Cliffs, N.J. 07632

INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 130 017

SCHOOL PLANNING, EVALUATION, AND COMMUNICATION SYSTEM (SPECS)

A set of processes for collecting and analyzing data describing school system outcomes, processes, and costs

School Planning, Evaluation and Communication System (SPECS) is an approach to program planning and evaluation which provides a clearly defined set of processes for collecting specific information about the many activities found in schools. It enables school systems to identify what they are trying to do for students, how they are trying to do it, related costs, and the results of these efforts.

SPECS has been designed specifically for schools in order to preserve prerogatives and responsibilities of three of the principal "actors" in a public shool district: The professional staff, the community, and the board of education. To make SPECS operational, materials have been developed to help school personnel implement five sets of activities (components). The first component consists of a systems analysis of the district to identify current activities. The second component focuses on program budgeting and cost accounting. The third component facilitates documenting outcomes, processes, and costs for each district activity. The fourth component involves the citizens of a school district in identifying its educational goals. The final component presents procedures for identifying and resolving discrepancies between district outcomes and the broad goals and expectations of the citizens.

SUBJECT AREA(S)

The subject areas are administrative systems and instructional management systems pertaining to procedures for: (1) Building a school district program structure, (2) converting to a program budget format, (3) collecting data about student outcomes, (4) community definition of a school district's goal structure, and (5) determining matches between community goals and student outcomes.

INTENDED USERS AND BENEFICIARIES

Primary users of SPECS materials and processes are the school district's professional staff. Teachers use materials to collect achievement information about students. Teachers and administrators use the materials to analyze, plan, and evaluate the curriculum. Citizens use SPECS processes indirectly by their involvement in district goal setting. Finally, boards of education use information generated by SPECS in making district policy decisions.

GOAL(S) OR PURPOSE(S)

Schools using SPECS will be able to plan, implement, evaluate, and replan programs of activities using actual performance data. SPECS provides processes for assisting schools in collecting six types of program information—outcomes, processes, and inputs (desired and actual). SPECS allows those responsible for programs to make this information explicit and use it systematically as they develop initial plans, monitor processes during implementation, evaluate results, and eventually formulate new plans for the next cycle of operations.

PATTERNS OF USE

SPECS may be used in an entire district, a single school building, or single programs within a district. The five components of activity may be used in a variety of sequences. The materials may be used outside the SPECS format in inservice courses for teachers and administrators, in university courses, or in workshops designed to explore the basic concepts supporting SPECS.

ASSESSMENT PROVISIONS

Assessment of the effectiveness of SPECS lies with the boards of education, administrators, and teachers since they are in a position to judge how much the system has improved their ability to plan and monitor program effectiveness and efficiency.

TIME REQUIREMENTS

Three to five years are required to implement all the components of SPECS. This is conditioned by the speed in which a district proceeds, the scope of its focus, and the commitment of resources to implementation.

IMPLEMENTATION PROCEDURES

Implementing SPECS requires several steps. First, a districtwide planning committee is required to determine a specific implementation strategy. Second, an implementation plan is necessary to identify time lines, needed resources, program areas for initial attention, and monitoring processes. Third, initial implementation efforts such as inservice sessions and information-sharing efforts must be started. Finally, the initial activities identified in the plan must be made operational.

RD 130 017

Summary Cost Information

Excluding computer access, a school district can initiate a 1-year plot implementation in one or two schools for approximately $3,000 as evidenced in current field test sites. The rate of expansion to other schools, the number of teachers and administrators involved, and the level of activity initiated in each of the components will affect costs in succeeding years. Computer costs will vary depending on the amount of data processed and the availability of computer services in each locality. To implement Component 2, districts should have access to a computer that can handle program cost accounting at least at the level of content areas within schools.

Personnel Required for Product Adoption and Implementation

A school district administrative staff member is required to coordinate all SPECS activities. The amount of time required by such a person is dependent on the projected scope and speed of implementation. In addition, most districts will require outside consultant help for 10-15 days the first year; thereafter, the need for such help will diminish.

ASSURANCES AND CLAIMS

SPECS is currently being field tested in 10 school districts in 6 States. Throughout the field test period, data are being collected upon which assurances and claims can be based.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Orientation materials:		To be announced		
Introductory brochure	1 per staff member			
Introductory monograph	1 per building			
Introductory slide/tape presentation	1 per building		Reusable	
Implementation manual	5-6 per district	To be announced		
Implementation booklets:		To be announced		
Component 1	1 per building			
Component 2	5-6 per district			
Component 3	1 per staff member			
Component 4	10-12 per district			
Component 5	1 per building			
Operational documents:		To be announced		
Component 3 for objectives, for processes, for outcomes	1 per teacher		Not reusable	
Summary plan	1 per teacher per program			
Summary results	1 per teacher per program			

DEVELOPER/AUTHOR:

Center for Educational Policy and Management
University of Oregon
1472 Kincaid St.
Eugene, Oreg. 97401

John M. Nagle, Project Director

AVAILABILITY

SPECS will not be available until the conclusion of the field tests. Additional information is currently available from:

Center for Educational Policy and Management
University of Oregon
1472 Kincaid St.
Eugene, Oreg. 97401

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 018

A SYSTEM FOR ASSESSING THE STAGES OF CONCERN OF INNOVATION USERS (THE S OF C DIMENSION OF THE CONCERNS-BASED ADOPTION MODEL (CBAM))

An instrument to measure an individual's concern regarding innovations

As a part of the experience of adopting innovations, it is hypothesized that innovation users have different concerns at different times. These stages of concern about the innovations have been described as one dimension of the *Concerns-Based Adoption Model* (CBAM) and are being researched at the Texas Research and Development Center. A system for assessing user concerns about an innovation has been developed as a part of this research on change. Concerns can be measured loosely through the use of an open-end questionnaire or conversation with the innovation user. More rigorous assessment of the concerns of innovation users is accomplished by use of a specially designed checklist: the *Stages of Concern Checklist* (S of C C).

The concept of concerns can be used by practicing adoption agents who are interested in diagnosing the feelings of the innovation users in order to more effectively determine needed interventions. Innovation users with different concerns about the innovation are likely to see the innovation and any interventions very differently. The S of C C would also be of use to the innovation evaluator and the change researcher.

It is hypothesized within the *Concerns-Based Adoption Model* that innovation users change developmentally with regard to their concerns about using any innovation. Their early concerns are quite self-oriented, focusing on exploration of what the consequences of using the innovation are likely to be for themselves. Later, their concerns appear to shift more toward how to adjust use of the innovation and subsequently how to maximize the collaborative impact of innovation use.

The *Stages of Concern* (S of C) assessment system allows adoption agents, evaluators, and researchers to quickly and easily measure and interpret the concerns of innovation users at any given time. This data, by itself or in combination with other data, can provide a realistic picture of the present state of innovation implementation.

SUBJECT AREA(S)

Evaluation, administration, and educational change.

The *Stages of Concern* (S of C) assessment system has been designed to be generic in character; that is, the measures can readily be used with different educational innovations and are applicable in both school and college settings, with minor adjustments to the cover page.

INTENDED USERS AND BENEFICIARIES

The *S of C Checklist* is completed by innovation users, and the resultant data are used by adoption agents to learn more about the present concerns and needs of the innovation users in order to better identify needed interventions. The *S of C Checklist* and procedures can also be used by innovation evaluators and change researchers as they study key variables of the innovation adoption process.

GOAL(S) OR PURPOSE(S)

The *Stages of Concern* assessment system has been developed in order to document the concerns that innovation users have. It is currently being used to identify the developmental nature of these stages of concern and to identify intervention strategies and tactics which are most applicable and relatable to a given stage of concern profile. This measurement, development, and research work is being done in conjunction with a comprehensive study of innovation implementation in schools and colleges in an attempt to understand the dynamics of individual innovation users and to facilitate the process of planned change.

PATTERNS OF USE

The concept of concerns can be applied after brief orientation and without a need to use sophisticated measurement systems. The concepts can be readily integrated into an adoption agent's thinking and actions. For those instances where measurement procedures are needed, an open-end concerns statement or the more rigorous *Stages of Concern Checklist* can be used.

The *Stages of Concern Checklist* consists of 35 items with an instruction/advance organizer page and 10 to 15 demographic items on the last page. The measure is completed by the innovation users at any point during their growth of use of the innovation. The resultant data are then processed by computer with development of a "concerns profile" that can be interpreted with regard to the present state of the innovation user.

ASSESSMENT PROVISIONS

The concerns can be assessed before actual use of the innovation begins, as well as during the time of actual use. The items on the checklist have been designed in such a way as to tap concerns that appear to occur more frequently at different times. Through computer processing, it is also possible to keep track of the relative intensity of the different stages.

TIME REQUIREMENTS

Approximately 15 to 20 minutes of an individual's time are required to complete the *S of C Checklist* or open-end statement. The measures are self-explanatory. By attaching self-addressed envelopes, it is possible for the measure to be mailed, thereby maintaining confidentiality and insuring prompt return. Processing of the S of C data requires keypunching and computer time. The final interpretation, however, is dependent upon the sophistication of the individual doing the interpretation and the relative complexity of the innovation being adopted.

IMPLEMENTATION PROCEDURES

For optimal analysis, the *S of C Checklist* should be processed by a computer where stage scores and S of C profiles can be analyzed. Before using the S of C measures, study, planning, training, and consultation in interpreting the data are needed, as well as study of the related publications dealing with stages of concern.

There are no special organizational requirements for use of the *Stages of Concern* assessment system. However, some new skills and knowledge are needed on the part of the personnel involved, as well as the necessary computer scoring capabilities.

The logistical requirements for use of the *S of C Checklist* are minimal; copies of the checklist and access to computer processing are required. Interpretation of the data, however, is more complicated and requires review of the related manuals, special training, and perhaps consultation.

ASSURANCES AND CLAIMS

The *S of C Checklist* and its interpretation have not been perceived by innovation users as threatening. Fewer than 1 percent of the more than 1,000 teachers and college professors involved in longitudinal studies have objected to the measure. However, at times, nonusers of an innovation have been concerned about whether they were able to effectively respond to the measure. Statistically, this has not been a problem; it is just a personal concern of noninnovation users when asked to respond to the measure.

There do not appear to be any social biases built into the measures or their interpretation. No incidences of this being an issue have been recorded during the 2 years of development and use.

As of this time, the *S of C Checklist* is still under tight control by the procedures for adopting educational innovations project staff. The relability estimates and other statistical data continue to be strong. However, a series of validity studies is still underway. The measure has not been used independent of project supervision. The project staff requires close coordination with those interested in using this measure.

The S of C measures have been developed over a 2-year period based upon an initial description and definition of the hypothesized stages of concern. The *S of C Checklist* has been developed through item generation, Q-sorting, small- and large-scale pilot testing, and use in a large-scale (N = 800) cross-sectional and longitudinal study of innovation implementation in schools and colleges. Careful and ongoing refinement of the measures and concepts with practitioner input is a regular part of the effort.

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

Gene E. Hall, Project Director
Archie A. George, Research Associate
William L. Rutherford, Research Associate
Beulah W. Newlove, Research Associate
Greg C. Gridley, Research Associate

AVAILABILITY

The results of the concept of stages of concern and its measurement are examined in the following publications and reports:

Hall, G.E., and Rutherford, W.L., "Concerns of Teachers About Implementing Faculty Teaming," Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April 2, 1975 (presently available).

***Manual for Scoring and Interpreting the Stages of Concern Checklist* (limited distribution by fall 1975).**

A series of additional research reports analyzing concerns of teachers involved in faculty teaming, and college faculty involved with instructional moduels, is being prepared. Other studies will be forthcoming during fiscal year 1976.

On a continuing basis, the *Procedures for Adopting Educational Innovations Project* updates a publication list, in annotated form, of the various publications and papers which the project staff has produced related to its studies of innovation implementation. The most up-to-date information about publications related to stages of concern will be found in the most recent copies of this publication list. Order from:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 019

A SYSTEM FOR ASSESSING THE LEVELS OF USE OF INNOVATION USERS (THE L OF U DIMENSION OF THE CONCERNS-BASED ADOPTION MODEL [CBAM])

An instrument to determine an individual's ability to identify and utilize innovative techniques

The *Levels of Use* assessment system is designed to measure the *Levels of Use* (L of U) dimension of the *Concerns-Based Adoption Model* (CBAM). This dimension describes the behaviors of individual users as they progress toward increased sophistication in use of an innovation. It is hypothesized that innovation users move from spending most of their efforts in orienting, to concentrating on managing, and finally to integrating use of an innovation. Eight discrete levels of use that an individual may demonstrate have been defined. It is hypothesized that growth in quality of use of an innovation (movement toward higher levels) by most individuals is developmental. Normally, individuals do not use an innovation for the first or even the second time as effectively and efficiently as they do the fourth or fifth time.

In order to assess the L of U of individual innovation users, a measurement system has been developed and applied in several large-scale and then cross-sectional and longitudinal studies. These studies have included samples of innovation users and nonusers in school and college settings. Measuring L of U entails conducting a semistructure interview which is tape recorded. The interview itself is sufficient to obtain a quick estimate of the overall level of use of the innovation for the individual interviewed. For a more rigorous analysis a rating procedure has been developed for analyzing the interview tapes.

The resultant data about L of U can be interpreted diagnostically by an adoption agent and can be used as the basis for selecting needed interventions. The data can also be used by change researchers and innovation evaluators as an indicator or criterion variable for success of innovation implementation. L of U data can also be used as a predictor variable for relating use of an innovation to outcomes. On an expanded level, the L of U assessment system can be tied to other variables described in the *Concerns-Based Adoption Model*, such as the concerns of innovation users, to present a more intricate and dynamic picture of the user system as its members adopt an innovation.

SUBJECT AREA(S)

Evaluation, administration, educational change.

The *Levels of Use* (L of U) assessment system is designed for use with individuals involved with any innovation. So far, researchers have used the L of U system with educational innovations in schools (e.g., team teaching) and in colleges and universities (e.g., instructional modules). The interview and the rating procedures are not innovation-specific or institution-specific; rather the procedures have been designed to be generic in nature.

INTENDED USERS AND BENEFICIARIES

Three user populations have already been actively involved with the L of U system: (1) Practicing adoption agents interested in more descriptive and quantitative information about their clients have used L of U so that they may better prescribe interventions, (2) curriculum evaluators who are interested in being able to describe how the innovation is being used in relation to summative outcomes have given consideration to the L of U scale, and (3) researchers of the change process are interested in applying the concepts and measurement procedures in other contexts and with a variety of innovations. The system has been designed to be easily applied by practitioners without extensive preparation. For the rigorous requirements of research, the system and concepts are readily accessible with additional preparation and training.

GOAL(S) OR PURPOSE(S)

The goals of the *Levels of Use* assessment system are to operationally describe and empirically measure the different ways that individual users of innovations actually perform in their work with the innovation. The *Levels of Use* dimension views innovation in terms of user behaviors and is void of affective aspects. The focus is on behaviorally describing what the innovation user actually is doing. Levels of use then serve as one dimension of the dynamics of the individual innovation user within the system adopting an innovation. The L of U assessment system can function independently as one variable of innovation implementation and change, or serve as one dimension of a multidimensional view of the change process (as described in the *Concerns-Based Adoption Model*).

PATTERNS OF USE

Once fully developed, the L of U assessment system will consist of a comprehensive training package. At the present time, one manual describes the requirements and the process for developing skill in conducting interviews of individual innovation users. An additional training manual is used to develop capability for analysis of tape-recorded interviews. For the practicing adoption agent, familiarization with the concepts and minimal training in the interview rating processes would be adequate for functioning clinically with L of U. For evaluators and researchers who are interested in applying the *Levels of Use* assessment system with a high degree of reliability, more extensive training, consultation, and practice in conducting interviews and in rating taped interviews would be required.

ASSESSMENT PROVISIONS

The key to successful use of the L of U assessment system appears to be the interviewer. Experience to date shows that the single most important prerequisite for successful L of U interviews is the ability of the interviewer to be nonthreatening and to establish a supportive conversational environment with the innovation user. A person who is overpowering or nonempathetic will not be successful in eliciting the necessary information.

Raters of L of U interviews, as well as interviewers themselves, also need to be reasonably knowledgeable of the innovation being studied. Unfamiliarity can reduce reliability, validity, and effectiveness in conducting interviews and in rating tapes.

TIME REQUIREMENTS

Training in conducting interviews to research criteria takes approximately 10 to 15 hours, while training to rate tapes takes 20 to 30 hours. Time estimates for the interviews that are planned should include the time for the actual interview and the same amount of time for listening to and rating the tape.

IMPLEMENTATION PROCEDURES

For adoption agents to use the *Levels of Use* assessment system as a clinical diagnostic tool, minimal review and training in the concepts of levels of use of the innovation is required. However, to conduct research with the measures requires additional time and resources. Portable tape recorders and equipment to listen to tapes for rating are essential, as well as practice tapes and statistical analysis systems for determining reliability.

There are no particular requirements for the clinical adoption agent who is going to use the concepts other than training to whatever degree is desired in the interview and rating procedures. For evaluation and research applications, portable tape recorders, tapes, and playback tape systems would all be required, in addition to the personnel to interview and to rate the interview tapes.

ASSURANCES AND CLAIMS

Assurances

The *Levels of Use* assessment system entails conducting tape-recorded, semistructured interviews with innovation users. The potential for harm with the *Levels of Use* assessment system is dependent upon the degree of trust that the innovation user can place in the interviewer. If the innovation user does not feel comfortable or feels that abusive use may be made of the statements given, then the innovation user will be reluctant to participate and should not be coerced into doing so. The validity of information obtained would be so suspect as to be not worth the risk. During the process of conducting over 1,000 interviews with teachers and college professors, less than 1 percent of the individuals have declined to participate in the interview activity. In cases where innovation users have expressed reluctance, no further steps were taken to involve them other than to acknowledge the legitimacy of their concerns and their right not to participate.

To date, there has been no indication of any built-in injustices or other biases in the L of U system. Again, the potential for bias is in the human element. The personnel selected to do the interviews and use the resultant information rather than the concepts and procedures that have been developed are the risks.

At the time of this writing, in the research and development phase, the *Levels of Use* assessment system has not been used independently by researchers other than those within the project. Therefore, statements of replicability and transportability are projections based upon limited experiences; others have not had sufficient experience with the concepts to testify to its effectiveness. However, no particular difficulties are anticipated.

Claims

Within the research project, a cadre of eight staff members have been trained to conduct L of U interviews, and eight other persons, ranging in formal education from 2 years of college through masters degrees, have been trained reliably to rate the taped interviews.

The *Levels of Use* assessment system has been developed through 2-1/2 years of work, beginning with generation of items, utilizing a Q-sort process, conducting small-scale field studies, recycling with large-scale, cross-sectional studies, and then extending the large-scale, cross-sectional study into a longitudinal study. The operational definitions of the levels have been through four major revisions based upon clinical experience and the process of conducting interviews and rating tapes. At this point, the operational definitions and the interview and rating procedures are reasonably well refined, developed, and describable.

RD 130 019

DEVELOPER/AUTHOR:

Research and Development Center for Teacher
Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

Gene E. Hall, Project Director
Susan F. Loucks, Research Associate
William L. Rutherford, Research Associate
Beulah W. Newlove, Research Associate

AVAILABILITY

The *Levels of Use* assessment system is in final stages of development. Availability of materials is as follows:

1. Hall, G.E., Loucks, S.F., Rutherford, W.L., and Newlove, B.W.; "Levels of Use of the Innovation: A Framework for Analyzing Innovation Adoption"; *Journal of Teacher Education*; vol. 26, No. 1 (spring 1975), pp. 52-56. (Detailed description of the *Levels of Use* concept).
2. *Manual for Conducting Levels of Use of the Innovation Interviews* and *Manual for Rating Levels of Use of the Innovation Interviews* (available for limited distribution by fall 1975).
3. A series of research reports of the L of U findings from cross-sectional and longitudinal studies of innovation implementation in schools and colleges.

Special awareness materials and a regularly updated publication list of research reports, manuals, products and papers that are available from the project can be obtained by writing to the distributor:

Research and Development Center for Teacher
Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 020

TWO INSTRUMENTS FOR DIAGNOSING USER SYSTEM READINESS FOR INNOVATIVE ADOPTION

Two checklists for use by educational change agents attempting to measure an organization's potential for change

Two "Trouble Shooting" Checklists (TSC's) have been developed to assist agents and administrators of educational change in their assessment of organizational variables which predict an institution's potential for successfully adopting innovations. Each checklist consists of 100 descriptive statements to be rated on a one to five Likert-type scale. These 100 items are random and can be sorted into scales which are descriptive of particular organizational variables (e.g., communications, characteristics of administrators). The items are based on extensive literature searches, interviews with change agents, and change agent responses to open-ended questionnaires. One checklist is designed for use in higher educational settings, while the other checklist is intended for use in school-based settings.

The TSC's are predictive in nature and focus on the institution as a whole. Although the TSC's identify behaviors of individuals or subgroups of individuals within the institution, an overall institutional profile is the true target. This profile is predictive: it gives a sign to the change agent to go ahead, slow down, or avoid an institution entirely. The TSC's are also diagnostic in that the profile points out both the stronger and weaker aspects of the institution.

All forms of the TSC identify for the administrator or the change agent both the ideal and unacceptable organizational variables related to the adoption and implementation of innovations. In order to make such an assessment, the "Trouble Shooting" Checklists have been based on the assumption that the following organizational dimensions are crucial: The general organizational structure of the institution; the descriptive characteristics of its members; the organizational climate; personality, leadership styles, and concerns of its members; the nature of communications which occur both within and without the institution; the levels at which previous innovations have been used; and the personality and social characteristics of the students. In addition, the school-based form focuses on outside community variables as well as those variables associated with the central school district office.

SUBJECT AREA(S)

Evaluation, scales, school administration, educational change.

The 100 items of the higher educational-based "Trouble-Shooting" Checklist (TSC) are random and can be categorized into the following distinct scales: (1) Organizational Climate, (2) Organizational Staff, (3) Communication, (4) Innovative Experience, and (5) Students.

The 100 items of the school-based TSC are randomized and can be sorted into 7 distinct scales: (1) School-Based Staff, (2) Communications, (3) Innovative Experience, (4) Central Administration, (5) School/Community Relations, (6) Organizational Climate, and (7) Students.

INTENDED USERS AND BENEFICIARIES

The main objective of the TSC's is to assist educational change agents in predicting the chances of successfully helping an institution adopt an innovation. The TSC's give order and predictive meaning to information gathered from otherwise unknown institutional situations. Although the instruments were originally designed for internal and external change agents, they could be of use to any member of an organization interested in adopting innovations. Because the items can be sorted into scales, the instruments allow the user to pinpoint problem areas within an organization. The instruments may also be completed by several members of one organization in order to identify problem areas on which all members of an organization agree.

GOAL(S) OR PURPOSE(S)

The TSC's are designed to aid educational change agents and administrators at all educational levels in difficult decisions concerning funding for institutions desiring to adopt innovations. It is hoped that these instruments will provide objective information upon which decisions can be based by providing a means to assess whether an institution can be expected to normally progress in its levels of use and stages of concern with respect to the adoption of innovations. In previous reviews of the literature, no similar, psychometrically formatted and easily scorable instrument focusing on the potential for successful innovation adoption has been located. Both the literature and the great number of requests which have been received indicate a marked need for such instruments.

RD 130 020

PATTERNS OF USE

The 100 items in the higher educational-based TSC are randomized and can be divided into 5 scales. The 100 items in the school-based TSC are randomized and can be divided into 7 scales. Detailed instructions for scoring the instruments are included with each instrument. Keys are given listing the randomized numbers for each of the scales. The scores are norm referenced for both scale scores and total scores.

ASSESSMENT PROVISIONS

A validity coefficient will be determined by correlating external change agents' subjective ratings of selected institutions with a second group of internal change agent and faculty TSC ratings. However, before this validity coefficient is computed, a comparison will be made between the ratings of the internal change agent group members (who may have higher status due to the fact that they are in a position to bring about change) and the faculty group members. This comparison will be made to check for the contaminating effects of a higher status TSC respondent giving more favorable ratings for their institution. If these two groups do differ significantly, two separate coefficients will be recorded.

TIME REQUIREMENTS

The TSC's are quickly scored and easily completed (30 minutes).

IMPLEMENTATION PROCEDURES

The TSC's are easily used, requiring only that the user be sensitive to the organizational characteristics and dynamics which the TSC's address. The user could be a change agent, administrator concerned with change, or even teachers concerned with identifying variables which might aid or slow down the change process.

MATERIALS AND EQUIPMENT

The instruments are available at the address listed below for the price of $1.50 per instrument.

ASSURANCES AND CLAIMS

The instruments have been used by change agents and teachers in two separate-item analyses studies, and a norming and validation study. The instruments have also been examined for clarity by organizational development specialists, examined for ethnic bias by minority group member research associates, and examined for sexual bias by female research associates investigating the adoption and implementation of educational innovations.

DEVELOPER/AUTHOR:

The Research and Development Center for Teacher Education
University of Texas at Austin
Austin, Tex. 78712

Brad A. Manning, Project Associate

AVAILABILITY

Reports on the early development of the TSC's are presently available. The final instruments are in the last stages of development, and will be available in November 1975. They may be ordered from the following address:

Research and Development Center for Teacher Education
University of Texas at Austin
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

AN ADMINISTRATOR'S HANDBOOK ON CURRICULUM EVALUATION

RD 130 021

A handbook to assist school district administrators in their efforts to evaluate pilot and ongoing programs of management direction with text, examples, and worksheets for a model school district evaluation program

The *Administrator's Handbook on Curriculum Evaluation* is designed to assist school district administrators in their efforts to evaluate both pilot and ongoing programs. The product enables administrators to direct a sound curriculum evaluation without requiring special training in statistics and experimental design. The handbook provides practical assistance in implementing a curriculum evaluation that is tailored to a particular school programs' goals and objectives.

The handbook is divided into three sections or books. Book I assists local school administrators in the supervision of preliminary evaluation activities, such as defining the evaluation purpose and specifying the evaluation methodology. Book II shows how data can be reduced into an organized and manageable form which can be easily analyzed and interpreted in terms of the purpose of the evaluation. Book III assists the person responsible for coordinating and monitoring the effective implementation of the evaluation project. Each book contains user management directions, text, examples, worksheets, and information sheets for application of the material to the district's evaluation project.

The handbook is suitable for either individual or group use. If the evaluation project is to be a group effort, one person should be designated project manager.

SUBJECT AREA(S)

Evaluation, administration, and curriculum planning.

The handbook emphasizes guiding an administrator through the activities necessary to evaluate a curriculum program. Major topics covered are: (1) Defining the evaluation purpose, (2) specifying the methodology, (3) collecting appropriate data, (4) analyzing data, (5) drawing conclusions and recommendations, and (6) documenting the evaluation.

INTENDED USERS AND BENEFICIARIES

The product is intended primarily for administrators responsible for program evaluation, including superintendents, assistant superintendents, building principals, and curriculum supervisors. Teachers and evaluation specialists may also find it helpful.

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school administrators obtain evaluations of curriculum programs that are directed at the questions they want answered. This is accomplished by providing a process for defining the purpose of the evaluation and specifying evaluation procedures that will result in the purpose being served. Evaluation procedures and results are tied to the decision and questions facing the administrator.

PATTERNS OF USE

The material is self-contained and requires no specially trained individual for use. It can be used by a single school administrator or a small administrative team.

The material is divided into units paralleling the major tasks of an evaluation project and should be used sequentially. The worksheets and information sheets in each unit allow district administrators to conduct their evaluation project as they work through the material.

ASSESSMENT PROVISIONS

Users are guided by checklists and information sheets in carrying out the project's major tasks.

TIME REQUIREMENTS

The time required to study and use the materials is approximately 8 hours. The length of an entire evaluation project will vary depending upon the program being evaluated by the school district and the evaluation procedures specified.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a district to use the product. However, in cases where project staff have no experience in evaluation design and statistics, the technical assistance of an evaluator would be helpful though not necessary.

In conducting an evaluation project, school district administrators should be committed to implementing, supporting, and funding the project for the required period of time.

Summary Cost Information

Since the product is still under development no price has been fixed. Current usage is restricted to field-test sites.

Personnel Required for Product Adoption and Implementation

The product can be used by a single administrator or small group of three to seven district staff members without any previous training in curriculum evaluation. The assistance of an experienced evaluator can be helpful. Consultation and other services are available from the developer. Cost for these services can be obtained from the developer.

ASSURANCES AND CLAIMS

The subject of the product is the management or conduct of a curriculum evaluation project. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Although early product formative evaluation activities have not addressed this issue, later product evaluation will.

The pilot test of the prototype involved school personnel of varied training and experience. Later formative evaluation will involve different school districts and varied personnel to help verify that the product is transportable and the results are capable of generalization.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Book I	1 per user	Not determined	Consumable	
Book II	1 per user	Not determined	Consumable	
Book III	1 per user	Not determined	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The prototype version of the product has been completed and tested. The product is currently being revised and will be available in spring and summer to field-test sites. Completion of the final product is scheduled for November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19102

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 022

COMMUNITY PERCEIVED NEEDS ASSESSMENT

A step-by-step guide for administrators who wish to collect data about community concerns and perceptions of the school and individual school programs

Community-Perceived Needs Assessment is a "hands-on" guide for administrators who want to collect data about community concerns, feelings, and perceptions of school activities or specific school programs. With this information, the administrator can then make specific decisions about school district goals, priorities, and programs. Much of the need for such an assessment project stems from current legislation that encourages school districts to actively involve community groups in educational decisionmaking.

The product covers seven tasks that must be completed in the assessment process. These tasks are: (1) Defining the purpose of a *Community-Perceived Needs Assessment* project in a local school district; (2) specifying the data collection method or methods, the number of respondents, and sampling techniques; (3) selecting specific respondents; (4) developing data collection materials; (5) collecting data; (6) processing and analyzing data; and (7) drawing conclusions and preparing a report.

Instructional materials are composed of three individually bound volumes that include worksheets, exercises, checklists, and planning sheets for each task. The planning sheets and checklists help the users apply the materials to the local school district needs assessment project. The guide is designed so that users can branch to the specific data collection method (mail questionnaire, interview, or group meeting) that best suits their own project goals and best reflects issues relevant to the local community. Included in the package is an optional supplement on sampling to help users draw a sample of the community.

The product is suitable for either individual or group use. If the needs assessment project is to be a group effort, one person should be designated project manager.

SUBJECT AREA(S)

Planning and administration.

The product emphasizes the knowledge and skills necessary to plan, conduct, and report an assessment of school needs as perceived by the school community. These skills allow the user to define the purpose of a community assessment project in a local school district; specify the data collection method or methods, the number of respondents, and sampling techniques; select specific respondents; develop data collection materials; collect data; process and analyze data; and draw conclusions and prepare a report.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by superintendents, other central office administrators, and building principals. Parents and other members of the community may also be included in the needs assessment effort.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable school administrators at the district or building level to plan, conduct, and report an assessment of school needs as perceived by the school community. It provides school staff with the knowledge and skills necessary to perform the specific tasks of such a project.

PATTERNS OF USE

The material is self-contained and requires no specially trained individual. Units of instruction are sequenced to parallel the tasks of a *Community-Perceived Needs Assessment* project and should be used sequentially as work on the project progresses. Although the product is self-contained, users may choose to obtain outside consultation or help in their needs assessment effort from the developer.

ASSESSMENT PROVISIONS

A series of checklists is provided to help users monitor each task in their needs assessment project.

TIME REQUIREMENTS

Users will need approximately 12 hours to work through the materials. The community assessment project will vary in length depending upon the scope and depth of the assessment effort the school district chooses to conduct.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a school or district to use the product. It is recommended, however, that one person manage the *Community-Perceived Needs Assessment* project and the use of the materials. The entire project staff can be drawn from the district and only auxiliary services or resources normally available in a district are required.

RD 130 022

Summary Cost Information

Since the product is still under development, no price has been fixed. Current usage is restricted to field test sites.

Personnel Required for Product Adoption and Implementation

The product can be used by a single administrator or small groups of district staff without any previous training in community needs assessment. Consultation and other services are available from the developer at various costs.

ASSURANCES AND CLAIMS

The subject of the product is the management or conduct of a *Community-Perceived Needs Assessment* project. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Although early product formative evaluation activities have not addressed this issue, later product evaluation will.

The pilot test of the prototype involved school personnel of varied training and experience. Later formative evaluation will involve different school districts and varied personnel to help verify that results can be generalized and transported.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Community-Perceived Needs Assessment:				
Book I	1 per district	To be announced	Consumable	
Book II	1 per user	To be announced	Consumable	
Book III	1 per district	To be announced	Reusable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The prototype version of the product has been completed and tested. The product is currently being revised and will be available in spring and summer 1975 to field test sites. Completion of the final product is scheduled for November 1975 and will be ordered from the distributor:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

EVALUATING SCHOOL PERSONNEL TODAY

RD 130 023

A review of the literature on evaluation stored in the ERIC system

This document, an evaluation of school personnel, is based on a review of the literature on evaluation in the Educational Resources Information Center (ERIC) system. Emphasis is placed on the evaluation of school administrators, teacher evaluation by students, and the teacher's role in evaluation. A 23-item bibliography is included.

SUBJECT AREA(S)

Subject areas concern evaluation of school personnel, including evaluation of administrators, student evaluation of teachers, and evaluation methods.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are practicing school personnel, especially administrators and those responsible for the evaluation of administrators.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to provide an overview of trends in the evaluation of school administrators and teachers.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Lorraine Poliakoff, Author

AVAILABILITY

Order No. ED 073 045, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

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RD 130 024

MODEL TRAINING PROGRAM IN QUALITATIVE EDUCATIONAL EVALUATION

An introduction to the basics of educational evaluation

The *Model Training Program in Qualitative Educational Evaluation* provides a reader with the basics of educational evaluation. The core of this workbook/textbook consists of short modules on various aspects of evaluation, ranging from the purposes evaluation serves to the costs of evaluating. Throughout the text, realistic problems illustrate the author's points. While complete solutions are given for some of the problems, readers are allowed to work out their own solutions to other problems.

Thorough study of the *Model Training Program* should assist the reader in setting up basic designs for most kinds of evaluation in most educational areas. Many of the institutional and technical difficulties that arise from evaluation designs are covered in the text. The theme of the book is qualitative educational evaluation. Material on the quantitative and statistical components of evaluation are readily available from other sources.

This workbook/textbook was designed for advanced undergraduate and graduate students. Several sections devoted to self-assessment help readers identify the skills educational evaluators need and the jobs available in this field. Finally, an annotated bibliography has been provided to aid students' further investigation of the subject.

SUBJECT AREA(S)

The subject area involves qualitative evaluation.

INTENDED USERS AND BENEFICIARIES

The text will be of use to graduate and advanced undergraduate students. Also, independent readers, such as school personnel, legislative assistants, and staff of state departments of education, can increase their understanding of and facility in evaluation with the book.

GOAL(S) OR PURPOSE(S)

The goal of this product is to put the user in a position to create the basic design for most types of evaluation and to handle the institutional and technical difficulties resulting from the design.

PATTERNS OF USE

Normally, the text would be used in an introductory graduate course in educational evaluation, collaterally with courses in statistics, tests, and measurements. The material cannot easily be compressed into a one-quarter graduate seminar. A semester, two-quarter, or full-year course or intensive summer workshop would be more appropriate. (In terms of class hours, 30 hours is too short; 60 would be more appropriate if a reasonable selection of the bibliographical references were available.)

DEVELOPER/AUTHOR:

Michael Scriven
1384 Queens Rd.
Berkeley, Calif. 94708

AVAILABILITY

The *Model Training Program in Qualitative Educational Evaluation* is expected to be available by June 1975, in the $10 to $13 price range. The materials will be available from the developer:

Michael Scriven
1384 Queens Rd.
Berkeley, Calif. 94708

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 025

SCHOOL DISTRICT PLANNING GUIDE FOR CHANGE

A kit designed to lead a curriculum planning committee through the steps required to plan curriculum improvement

The *School District Planning Guide for Change* guides school administrators and teachers in planning curriculum improvement. It provides them with strategies for identifying the student-related factors motivating curricular improvement; specifying desired characteristics of a new or modified curriculum program; and searching for alternative student learning materials, administrative and staff development opportunities, and methods of allocating resources. Use of the guide can help prevent an unclear, hasty, or narrow assessment of student needs and current practice; premature or inappropriate choice of a new program; and difficulty in securing support for curriculum change.

The product is designed for use by a curriculum planning committee made up of central office administrators, curriculum coordinators, principals, and teachers. One member is responsible for planning, organizing, and monitoring the group activities. Content is divided into four units. The first unit helps users recommend the direction for curriculum improvement; the second helps them specify their improvement requirements; the third shows them how to plan and conduct a search for appropriate student learning materials, administrative and staff development opportunities, and methods of resource allocation; and the fourth assists users in reporting their decisions and findings. There is also a unit for the individual who is to manage the planning effort. These five units form Book 1.

Book 2 is a resource manual containing sources of information which can be consulted by users in their search for program alternatives. Users read the text, analyze examples, work through the practice exercises, and record their planning decisions on cumulative information sheets. Worksheets and information sheets have direct application to curriculum improvement in their own school district. Branching is included for those users who desire additional examples, who wish to skip certain tasks not related to their immediate project, or who wish to review supplementary materials.

SUBJECT AREA(S)

Planning and administration.

The product emphasizes helping school administrators plan curriculum improvement. This involves determining desired student outcomes, specifying characteristics for new or modified programs, and searching for alternative means of improving programs.

INTENDED USERS AND BENEFICIARIES

To make the best use of the guide, the district should encourage the participation of representative individuals and groups in the planning process. Users might include central office administrators, curriculum coordinators, principals, and teachers.

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school districts plan curriculum improvement. This is accomplished by helping districts: (1) To define desired student performance outcomes, (2) to determine needed improvements in curriculum and instruction, (3) to locate alternatives to current practice, and (4) to document reasons for planned improvements.

PATTERNS OF USE

Although it is recommended that the guide be used in a group setting, the material is suitable for individual use. It is self-contained and requires no specially trained individual for use. The developers can, however, provide consultation or assistance in curriculum planning and the use of the package if a district so desires.

ASSESSMENT PROVISIONS

Users record their planning decisions on cumulative information sheets. Checklists and guidelines assist the project manager in monitoring the planning effort.

TIME REQUIREMENTS

The product requires approximately 3 days to work through. The total time required for the planning effort varies according to the amount of time devoted to conducting a search for alternative programs.

IMPLEMENTATION PROCEDURES

The product requires no specially trained individuals or other resources. However, school districts must be willing to allocate a moderate amount of staff time for planning purposes.

RD 130 025

Summary Cost Information

Since the product is still under development, no price has been fixed. Current usage is restricted to field test sites.

Personnel Required for Product Adoption and Implementation

The product can be used by a single administrator or small group of three to seven district staff members without any previous training in curriculum planning. Consultation and other services can be obtained from the developer at various costs.

ASSURANCES AND CLAIMS

The subject of the product is the systematic planning of curriculum improvement. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Although early product formative evaluation activities have not addressed this issue, later product evaluation will.

The pilot test of the prototype involved school personnel of varied training and experience. Later formative evaluation will involve different school districts and varied personnel to help verify the generalization of results and transportability.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Book I	1 per user	Not determined	Consumable	
Book II	1 per district		Reusable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The prototype version of *School District Planning Guide for Change* has been completed and tested. The product is currently being revised and will be available in spring and summer 1975 to field test sites. Completion of the final product is scheduled for November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 026

A RADICAL AND REGRESSIVE SOLUTION TO THE PROBLEM OF EVALUATION

A review of two major advances in preschool strategy, which proposes another evaluation approach

This paper reviews two major advances in preschool evaluation strategy that developed as a result of trying to evaluate Head Start. It proposes another evaluation approach. The first advance in evaluation procedure was to conceive educational objectives in terms of processes rather than products; the second was to recognize the importance of comprehensiveness by extending evaluation content to include affective and social as well as cognitive processes. The alternative plan proposed in this report entails systematic and comprehensive evaluation of the child's school environment, to be followed by a theoretical analysis of the potential impact of school experiences. This approach represents a shift in emphasis from the assessment of impact on children to the assessment of the antecedent condition, the classroom environment.

SUBJECT AREA(S)

Subjects discussed in this paper include: (1) Evaluation needs and evaluation methods, (2) classroom environment, (3) early childhood education and educational objectives, (4) classroom observation techniques, and (5) classroom research.

INTENDED USERS AND BENEFICIARIES

This paper outlines some fresh approaches to evaluation for teachers, administrators, and consultants involved in planning and evaluating early childhood programs.

GOAL(S) OR PURPOSE(S)

This paper examines current practices in the evaluation and assessment of early childhood programs and suggests alternative evaluation strategies.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Herbert Zimiles, Author

AVAILABILITY

Order No. ED 097 958, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

This paper was selected for inclusion in a forthcoming book of readings, *Current Topics in Early Childhood Education*, edited by Lilian G. Katz and scheduled for publication fall in 1975.

Lawrence Erlbaum Associates, Inc., Publishers
62 Maria Dr.
Hillsdale, N.J. 07642

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 027

ACADEMIC AND SOCIAL BEHAVIOR ASSESSMENT KIT

A system which allows relatively untrained personnel to systematically assess student performance

The *Academic and Social Behavior Assessment Kit* was developed at the Experimental Education Unit in an effort to provide an assessment tool which would meet the following requirements: (1) Systematically assess performance levels in specific skills areas, (2) be administered by untrained personnel, (3) provide relevant information for lesson planning, (4) be used for continuous measurement of performance, (5) not require long periods of time for administration, and (6) individual probes in selected skill areas be used separately.

The kit is efficient and economical in terms of the time required for assessment, the cost of testing materials, and the ease of administration. No special training is required to follow the procedures described in the directions. The kit was designed to be used to pinpoint academic and social deficits in relation to peer skills levels by administering 1-minute timed probes in the preacademic and academic skills areas of reading, mathematics, and writing, and to monitor a pupil's educational advancement in these areas.

There are two parts to the Academic Assessment. The first is a packet of 5- by 8-inch screening probes which are given untimed. These probes correspond numerically to the 8 1/2- by 11-inch 1-minute timed probes. The screening probes can save examiner time by eliminating the need to give some of the 1-minute probes on skills the pupil already possesses.

The second part consists of 8 1/2- by 11-inch, 1-minute timed probes. When selected by the screening instrument, these probes are given once a day for 5 consecutive days. Research has shown that performance rates vary from day to day, so rates taken over a 5-day period give a more accurate picture of a pupil's abilities. These rates should be compared to "average" peer performance rates on the same probes in order to establish goals or aims for remediation of those skills where the performance rates are below peer rates. Administration of the screening probes takes approximately 20 minutes. Administration of the 5-day timed probes will vary with the number of probes selected.

The Social Behavior Assessment is also taken over a 5-day period. Instructions are provided for pinpointing inappropriate and appropriate behaviors for observation during a specific time period during the schoolday. A 5-day record sheet is also provided for recording observations.

The screening probes and 8 1/2- by 11-inch color probes are laminated for repeated use. The other 8 1/2- by 11-inch probes and data collection sheets are printed on index paper to be used as duplication masters.

SUBJECT AREA(S)

The first 21 probes are preacademic probes which cover: Alphabet and number recall; matching number to set; number sequencing; matching (symbols, letters, and groups); auditory and visual discrimination of letters and words; and fine motor skills (tracing, drawing between lines, and copying).

Academic probes 22 through 40 cover number and letter recognition, phonics, printing, and cursive writing skills, oral reading rate, and basic mathematics skills through division.

INTENDED USERS AND BENEFICIARIES

This assessment kit is designed to be used by teachers, teacher's aides, or other school personnel (e.g., counselors, psychologists) in the classroom. It may also be administered by a cross-age tutor or a volunteer parent. The kit is intended to be used with students, regardless of chronological age, who possess the required entry skills. The preacademic and academic probes are particularly appropriate for average pupils and pupils with moderate handicaps or specific learning disabilities.

There are certain pupil entry behaviors required for academic assessment. The pupil must be able to communicate with the examiner, understand the concepts of same and different, use a pencil or grease pencil, and point.

GOAL(S) OR PURPOSE(S)

The purpose of the kit is to identify precisely each child's skill strengths and deficits in both academic and social behaviors and to monitor progress in these areas.

PATTERNS OF USE

Probes for particular skill areas, such as addition facts, may be given at frequent intervals (e.g., every week) to assess the effectiveness of specific teaching procedures or materials. Probes may also be given at quarterly intervals to summarize a pupil's progress.

ASSESSMENT PROVISIONS

The screening probes for the academic assessment battery include 3 to 4 problems for each of the 40 academic assessment battery probes. The screening probes indicate whether the pupil has the skills necessary for administration of the academic assessment battery and, if so, which academic probes should be given.

A progress report data sheet is included for recording scores obtained on repeated administrations of academic probes and provides an overview of each pupil's individual progress.

A collection of peer data is recommended in establishing academic objectives for the student, which are relevant to the particular classroom setting. A data analysis sheet includes a column for peer scores as well as referred pupil scores.

Definitions of the types of errors are printed on the back of each probe sheet. An error analysis sheet is provided for noting, for both the referred pupil and peer, the type of errors which occurred, the frequency of their occurrence, and omissions. The error analysis is to be completed for each academic assessment probe administered.

TIME REQUIREMENTS

The initial screening requires from 10 to 20 minutes, depending on examiner knowledge of the child's abilities and limitations. For example, if the pupil is in a 1st-grade classroom, there would be no need to present the multiplication and division probes, thus reducing the testing time. The timed academic assessment probes which are to be given for 3 to 5 consecutive days will require varying amounts of time depending on the total number of probes which are to be given. They are selected through use of the screening tool. Social data may be taken during a certain class period, if the frequency of occurrence is high for the pinpointed behaviors. It should be taken for the entire day if the behaviors occur infrequently.

IMPLEMENTATION PROCEDURES

The screening probes included are ready for immediate use. However, all other materials, including data summary sheets and instructions for each 1-minute probe, need to be duplicated. These pages of the kit are intended to serve as master copies for whatever copying and duplicating methods (e.g., thermofax/ditto or electrostencil/mimeo) are available to the user.

Personnel Required for Product Adoption and Implementation

The oral preacademic and academic screening probes and timed probes must be given individually. The written probes may be given by one examiner to a group of pupils at a time. Objective instructions for administration, scoring, and error analysis are given and can be followed by teacher aides, volunteers, or other paraprofessionals as well as teachers.

ASSURANCES AND CLAIMS

The kit has been used with approximately 50 pupils at the Experimental Education Unit. It has been used for intake assessment and quarterly monitoring of pupils' progress for 1 to 2 years for these pupils. Initial analysis of the data obtained indicated that the kit provided information relevant to program planning (areas of pupil strengths and weaknesses) and to progress and return placement of pupils to public school programs.

The kit is currently in use in the following public school settings: Tacoma, Washington, program for the severely handicapped; Vancouver, British Columbia, Canada, University of British Columbia Special Education Department; Boise, Idaho, Learning Disabilities Project; Belgrade, Montana, Montana Regional Services. There are no indications of harmful effects. There are no forms of social bias in the kit. The general instructions suggest assessment of peer performance for comparison in order to set goals and objectives in planning remedial programs. However, after aims have been established, progress checks with the kit are compared only to the pupil's own baseline performance, and progress is assessed on this basis.

Data and feedback from users of the kit will be collected to determine the kit's usefulness in terms of assessing pupil strengths and deficits relevant to public school classroom functioning and to make revisions if necessary. Performance data will be used to establish normative performance ranges for each academic probe and will be provided to users of the kit for reference.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Screening probes	1 set per examiner	10.00	Reusable	
Administration and scoring instructions Social and academic assessment probe masters for duplication (8-1/2 by 11 inches)	1 set per department	43.98	Reusable	
Academic probes (to be duplicated by examiner)	5 copies of each probe per pupil	Not determined	Reusable	
Stopwatch, clock, or watch with sweep second hand;	1 per examiner	Not determined	Reusable	
Marking pen	1 per examiner	Not determined	Reusable	

DEVELOPER/AUTHOR:

Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

Zane Weaver
Norris G. Haring, Project Director

AVAILABILITY

Twenty copies of the kit were produced in 1974. An additional 100 copies containing revisions are being produced at this time and will be available for public school use by summer 1975. For information contact:

Experimental Education Unit, WJ-10
Child Development and Mental Retardation Center
University of Washington
Seattle, Wash. 98195

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 028

ASSESSMENT OF STUDENT ATTITUDES TOWARD LEARNING ENVIRONMENTS SCALE (ASA)

An instrument measuring secondary students' attitudes toward a variety of traditional and nontraditional learning environments

This product was designed to assess student attitudes toward various aspects of learning environments. The initial impetus for its development was the need for an evaluation tool in an experimental career education project. This need for a well-documented instrument which could measure student attitudes toward a variety of traditional and nontraditional learning environments could not be met with existing products. The *Assessment of Student Attitudes toward Learning Environments* (ASA) was developed to meet this perceived measurement need. The content was designed for secondary school students.

The ASA is based on the Shaw and Wright concept of attitudes as relatively enduring systems of covert, implicit, affective, and evaluative reactions which reflect learned concepts or beliefs about characteristics of social objects or classes of social objects. The measurement strategy is based upon Likert's modification of the Thurstone technique. Items are presented to the subject group for responsive rating on a five-point scale.

The ASA consists of 26 items; each depicts a hypothetical student attitude relevant to learning environments. Subjects are asked to rate their agreement with the expressed attitude on a scale from strongly agree to strongly disagree. Items are evenly distributed with regard to negative or positive directionality. Items are divided into four subscales: Attitude toward education in general, attitude toward school curriculum, attitude toward school resources, and attitude toward school counseling. The ASA yields an overall score plus these four subscores.

This product may be utilized by school administrators, evaluators, counselors, or teachers to determine student attitudes toward the elements of the learning environment listed. Uses include diagnosis of existing attitudes, assessment of change over time, and determination of attitudinal effects related to educational programs. The implementer's function is to administer the instrument, tabulate scores, and interpret results. Students complete the instrument and should be encouraged to participate in its interpretation.

SUBJECT AREA(S)

Evaluation. Secondary school student attitudes.

INTENDED USERS

Secondary school administrators, evaluators, counselors, and teachers.

GOAL(S) OR PURPOSE(S)

To assess student attitudes toward traditional or nontraditional secondary school programs and components.

PATTERNS OF USE

Can be used as one-time assessment for diagnostic purposes or prepost assessment of attitudinal change.

ASSESSMENT PROVISIONS

The product is an assessment instrument.

TIME REQUIREMENTS

The product requires 15-20 minutes for each administration.

IMPLEMENTATION PROCEDURES

The product requires no special equipment or facilities and may be administered on an individual or group basis.

Personnel Required for Product Adoption and Implementation

Prepublication copies of instrument are available from developers at a nominal cost. Costs of product after publication have not been determined. Existing personnel can be used to administer the ASA.

ASSURANCES AND CLAIMS

Assurances

The ASA has been carefully examined to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. The product is fully transportable. The replicability of psychometric qualities is currently under study. Use of the ASA has not resulted in any observed harmful effects.

Claims

Three claims are asserted for the ASA: (1) The ASA is a reliable instrument, (2) the ASA is a valid instrument, and (3) the ASA is an instrument which is sensitive to the detection of differential changes in student attitudes.

Each of the claims is documented below. Backup documentation is provided in "The Assessment of Student Attitudes Toward Learning Environments," a paper presented at the 1975 annual meeting of the American Educational Research Association.

The ASA is a reliable instrument. The reliability of the ASA was assessed by determining its internal consistency in each of its developmental forms. Split-half reliabilities obtained were .96, .86, and .90 (Spearman-Brown). Sample sizes associated with each reliability coefficient were 30, 258, and 205, respectively.

The ASA is a valid instrument. The validity of the ASA was assessed with the criterion of teacher ratings. Teacher ratings and student responses for the first sample cited had an 88-percent agreement in directionality. While further validity studies are planned, available evidence supports the validity of the instrument.

The ASA is an instrument sensitive to the detection of differential changes in student attitudes. The ASA was used on a pretest-posttest basis with fiscal year 1974 experimental and control students in the RBS career education program. Analyses of variance on pretest scores indicated no differences between groups. Following analyses of covariance on posttest scores with pretest scores, the covariate indicated differential group change in attitude on four of the five scales of the ASA.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St., Suite 1700
Philadelphia, Pa. 19103

AVAILABILITY

Prepublication copies of the ASA are available from the developers. Publication copies will be available September 1, 1975.

For further information contact:
Research for Better Schools, Inc.
1700 Market St., Suite 1700
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 029

COLORED BLOCKS TEST OF BASIC COGNITIVE LEVEL

A language/culture free measure of Piagetian stages of development

This test is a relatively standardized means of assessing Piagetian abilities in children age 5 to adults. The test uses the same simple stimuli throughout to set up a series of problems whose solution requires the use of the logical abilities at each of Piaget's stages of development. The stimuli for all of the questions are wooden blocks of two colors and four shapes. The test is administered to each child on an individual, untimed basis. The instructions are presented both verbally and nonverbally so that they are relatively free of language contamination.

The problems are designed so that there are numerous correct answers. Any child lacking the necessary abilities to perform correctly will feel perfectly satisfied with his or her own lower level answer. The teaching situation serves as the test's basic structure. The tester trains the child in the necessary subskills for each problem and ascertains that the child is attending to the proper aspects of the structure before presenting the problems that will be scored. In this way, the test measures each child's optimal abilities. By determining the most advanced type of problem successfully dealt with by the child, the tester obtains an indication of the logical stage of the child. In addition, a total score can be obtained and used as an indication of the child's ability to adapt cognitively to new situations.

SUBJECT AREA(S)

The subject area is assessing cognitive development in persons aged 5 years and older through adulthood.

INTENDED USERS AND BENEFICIARIES

The test is suitable for use by researchers, curriculum evaluators, teachers, and clinicians. It has been used with samples of Alaskan Eskimos and Creole-English-speaking children in Hawaii as well as more standard U.S. populations and has been found to be of particular use in cross-cultural situations because of its culture-free nature.

GOAL(S) OR PURPOSE(S)

The purpose of this test is to provide a measure of degree of cognitive maturity which is relatively free of contamination due to linguistic abilities or stimulus familiarity of the child.

TIME REQUIREMENTS

The time required to administer this test is approximately 30 minutes for each child.

IMPLEMENTATION PROCEDURES

The test requires only a set of wooden blocks and a set of drawings which is easily constructed from instructions in the manual. The product can be reused indefinitely and is easily portable.

Summary Cost Information

The entire test can be constructed for approximately $20.

Personnel Required for Product Adoption and Implementation

Only one trained tester is required for the complete implementation of this test.

ASSURANCES AND CLAIMS

The test has been designed to be a pleasant, entertaining experience for the child. It elicits no anxiety on the child's part, since its open-ended nature provides no feedback as to performance.

The test's reliance on only colored blocks as materials assures that it in no way encourages sexism, racism, or any other form of social unfairness. It is also relatively free of bias due to linguistic ability or past familiarity with the materials involved.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Wooden blocks and stimulus cards as described	1 set	20.00		
Manual	1			

DEVELOPER/AUTHOR:

January 1968-August 1974
University of Chicago
Early Education Research Center
Chicago, Ill. 60637

September 1974-January 1975
Center for Psychosocial Studies
233 North Michigan Ave.
Chicago, Ill. 60601

January 1975-Present
University of Houston
Department of Psychology
Houston, Tex. 77004

Carol F. Feldman, Project Director

AVAILABILITY

A test manual describing the testing procedure and giving details for constructing a copy of the test is available from the project director.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 030

A COMPUTER PROGRAM FOR ASSESSING "TRUE" STUDENT LEARNING GAINS AND THEIR RELATION TO TEACHER AND STUDENT CHARACTERISTICS

A statistical package computing student gain scores and correlations between these scores and other pupil or teacher data

On many occasions, educational practitioners are interested in measuring the degree to which students increase their knowledge of a particular subject matter or grow in their interpersonal maturity. Educational psychologists have shown that the usual practice of subtracting the score received on a relevant pretest from that recorded on the posttest, following some instructional or intervention program, can lead to fallacious conclusions if the tests are not perfectly reliable. Statistical procedures which provide more accurate estimates of true gains have been proposed recently. A computer program has been written which provides estimates of true gains for individual students or groups of students, computes correlations between the true gain scores and other variables which reflect student or teacher characteristics, and allows for comparisons of the gains made by classes which have received different instructional programs or which differ in some other way.

The program is written in SCOPE FORTRAN IV and can be implemented directly on Control Data Corporation 6000 Series computers. With slight modifications, the program could be adapted for use on IBM or UNIVAC machines. The amount of data (i.e., the number of students, classes, and other variables) which can be processed and analyzed at one time is determined by the size of the computer the user has available. The program requires as input the following: Scores on both a pretest and posttest for each student and an estimate of the reliability of the pretest. Optionally, the user may input information about class membership, instructional program, student characteristics, and teacher characteristics. The user may select from a variety of output options, including estimates of the true pretest, posttest and gain scores (which are corrected for error of measurement), analyses of the effects of class membership and other variables on true gains, and regression equations which can be used in future studies to predict true gains in new samples of students. It is stressed that the program's usefulness is not confined to estimating true gains in academic skills. Any attribute (such as coping skills, interpersonal effectiveness, or attitudes about school) can be processed by this program provided appropriate pretest, posttest, and reliability data are available. The computer program was written to determine the extent to which the interaction of student and teacher characteristics influences true gains. Certain institutions might find it a useful tool for determining which pairings of teachers, students, or classes will maximize expected student gains.

SUBJECT AREA(S)

The subject areas are evaluation and administration. The program can be used for the assessment of true gains in any subject area in which there are pretest and posttest scores available.

INTENDED USERS AND BENEFICIARIES

The technical aspects of the computer program must be handled by a trained computer programer. The proper use of the scores and statistics generated by the program can be made by a person trained in psychological testing. The pupils and teachers who are involved in the testing program will be the primary beneficiaries of the results. The computer program can be used by an institution which offers educational services to students of any grade level, from elementary school through college.

GOAL(S) OR PURPOSE(S)

The purposes of this program are: (1) To calculate true gain scores, (2) to compute correlations between true gain scores and relevant student and teacher variables, and (3) to provide a statistical analysis of the differences in mean true gains shown by various groups of pupils.

PATTERNS OF USE

The computer program can be used by any educational institution which has access to computer facilities and programing specialists. Interpretation of some of the output from the program can be made only by a person trained in educational test theory and statistics.

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TIME REQUIREMENTS

The amount of time required for use of the program can be divided into personnel and computer time. The number of hours of work required of teachers, keypunchers, and programers will vary according to amount of data collected. The number of seconds or minutes of actual computer time required for a given analysis will vary according to factors such as type of computer used, amount of data to be processed, and degree of intercorrelation among the variables.

IMPLEMENTATION PROCEDURES

After a card copy of the program and the program description have been obtained from the developers, the users must examine the FORTRAN source listing to check its compatibility with the available compilers. Once this is done and the users have obtained a successful compilation of the program on their computer, a test data deck supplied by the developers can be submitted and the output obtained checked against that listed in the program description. If the identical results are obtained, the users are ready to analyze any data sets that they may have.

Specialized personnel and equipment are obviously required for the use of this product. Staff skilled in computer programing, statistics, and psychological testing are required. The computer program can be implemented only on a medium- to large-size, high-speed computer.

ASSURANCES AND CLAIMS

The issues of harmlessness and absence of bias do not arise. In fact, if the data put into the program are unbiased, the program output can detect significant differences due to status, ethnicity, class grouping and so on. The developers assure that the program can be transported and implemented on suitable computational equipment.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Source deck	1	To be announced	Reusable	
Test deck	1	To be announced	Reusable	
Program description	1	To be announced	Reusable	

Note: Specialized personnel and equipment are obviously required for the use of this product. Staff must be skilled in computer programing, statistics, and psychological testing. The computer program can be implemented only on a medium- to large-size, high-speed computer.

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
Education Annex 3.203-B
University of Texas at Austin
Austin, Tex. 78712

Robert Peck, Codirector
Noel Dunivant, Assistant Project Director

AVAILABILITY

Copies of the source deck, test deck, and program description will be available in November 1975 from:
Research and Development Center for Teacher Education
Education Annex 3.203-B
University of Texas at Austin
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 031

PSYCHOSOCIAL MATURITY (PSM) INVENTORY

A self-report inventory measuring the psychological maturity of adolescents, ages 11-18

The *Psychosocial Maturity Inventory* (PSM Inventory) is a self-report inventory that measures the psychosocial maturity of adolescents in the approximate age range of 11-18. The instrument is composed of nine subscales—self-reliance, work orientation, and identity (measures of individual adequacy); communication skills, enlightened trust, and knowledge of major roles (interpersonal adequacy); and social commitment, openness to sociopolitical change, and tolerance of individual and cultural difference (social adequacy).

The PSM inventory is based upon a model of psychosocial maturity that specifies the personal and social qualities and skills that individuals need to perform effectively in society. The model integrates various aspects of development so that these aspects can be assessed as a whole and not on a piecemeal basis.

The PSM inventory can be administered to students by the teacher or other personnel. Completion requires about one class period (50 minutes). The results of the inventory—student scores on psychosocial maturity—are used by the teacher, counselors, and school administrators to determine the needs of the student in developing the personal and social skills and qualities that make up psychosocial maturity. They can then address these needs through classroom instruction, counseling, and schoolwide programs.

The following are sample items from each subscale: A minus sign following an item indicates that the "mature" response lies in the direction of disagreement; a plus sign indicates that the "mature" response lies in the direction of agreement with the item.

1. Self-reliance: You are probably wrong if your friends are against what you decide. (–)
2. Work orientation: Someone often has to tell me what to do. (–)
3. Identity: I believe in working only as hard as I have to. (–)
4. If something more interesting comes along, I will usually stop anything I'm doing. (–)
5. I change the way I feel and act so often that I sometimes wonder who the "real" me is. (–)
6. I have to struggle to keep my behavior what it ought to be. (–)

SUBJECT AREA(S)

Personal and social needs assessment of students as a basis for program development is the subject area.

INTENDED USERS AND BENEFICIARIES

The program is used by teachers, counselors, and school administrators to assess students in grades 5 to 12. Primary beneficiaries are the students whose problems of psychosocial maturity are identified and alleviated.

GOAL(S) OR PURPOSE(S)

The educational community lacks tools for assessing the nonacademic growth of students—their growth as persons and as social beings. This severely limits the schools' ability to exert a systematic positive influence on children's attitudes, values, and personal dispositions. The purpose of the *Psychosocial Maturity Inventory* (PSM) is to provide educators with the assessment instrument that will let them identify specific student needs and develop specific interventions.

PATTERNS OF USE

The assessment value of the inventory is enhanced by its use as a complete unit; however, the subscales can be used individually to assess a specific characteristic or trait.

ASSESSMENT PROVISIONS

The inventory is used to assess student needs and then used again to assess the effects of programs designed to meet the needs. The inventory is given initially; based on the results, the school or teacher implements developmental programs or classwork. The inventory is then readministered to assess any differences in psychosocial maturity produced by the implementation.

TIME REQUIREMENTS

Forty-five to sixty minutes is required for students to take the inventory. Standardized answer sheets are used, and scoring can be quickly accomplished by computer. If used by counselors or teachers with individuals or class-size groups, it can be hand-scored in a reasonable amount of time.

IMPLEMENTATION PROCEDURES

Special services—computer scoring of inventory on large-scale basis—are available.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

There is no evidence to suggest that the product will induce harm (physical, psychological, sociological, or other). In administering the inventory to more than 100,000 students, no student problems developed concerning the inventory questions and answers.

Assurances of Social Fairness

The product does not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes. The inventory does, however, reveal the existence of cultural differences by sex and race—females and whites tend to score higher than males and blacks.

Assurances of Replicability or Transportability

The inventory has been used in a variety of school settings and has been administered by various personnel other than the developers.

Claims of Effectiveness

Using data from a number of administrations of the inventory with many student populations, analyses have shown that the nine subscales of the inventory have adequate internal consistency at grades 5 to 12. The degree of homogeneity within scales makes them appropriate for use in studying (or comparing) groups of individuals, but not for analysis or diagnosis at the level of the single individual. Validity evidence to date is promising, particularly concerning the subscales representing individual and social adequacy.

Claims of Social Fairness

The inventory assesses a concept of psychosocial maturity that includes tolerance of differences in others. High scorers on the inventory have more socially fair attitudes than low scorers. The inventory promotes social fairness by including socially fair attitudes as a facet of maturity. It promotes the "teaching" of socially fair attitudes when it shows school or district areas where student development is needed.

Claims of Careful Product Development

The inventory is based on a concept of psychosocial maturity derived from the scientific disciplines of psychology, sociology, and biology. The model was posted, and scales were developed to measure each aspect of the model. Several studies were conducted of 349 items (form A), resulting in reduction to 108 items (form B). Further analyses produced form C, with 89-93 items, followed by form D, which differs only slightly.

A number of studies were conducted to explore the divergent and concurrent validity of the individual subscales with satisfactory results. Studies of construct validity produced equally satisfactory assurances that the inventory does measure the traits and characteristics identified by the model.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Inventory	1 per student	Not determined	Each time unit is used	

DEVELOPER/AUTHOR:

Center for Social Organization of Schools
The Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

Ellen Greenberger, Program Director

AVAILABILITY

The inventory is available in form B, form C, or form D. The material is not copyrighted. Copyright will be sought if widespread publication is attempted. Current plans call for the use of the inventory in research studies when the assessment of nonacademic talents of adolescents is an important need. The distributor is:

Center for Social Organization of Schools
The Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 032

PURDUE SELF CONCEPT SCALE FOR PRIMARY GRADE CHILDREN

A paper-and-pencil instrument for measuring self-esteem as related to physical, social, and academic skills

This product is an instrument suitable for use with young children in grades 1, 2, or 3. It is designed as a paper-and-pencil instrument to be administered to small groups of children (10-12 students). The instrument is intended for group comparisons in research and evaluation studies, and not for individual diagnosis. This self-concept instrument was developed on the grounds that a positive self-concept is essential to effective learning. There was a need for a short, easily administered instrument for use in evaluation studies of educational programs where improvement of self-concept was an expected side effect of the program. The major emphasis of the instrument was development of the child's self-esteem with respect to such content as physical, social, and academic skills and acceptance by peers and family.

The instrument consists of 28 items. Each item consists of two bipolar self-descriptions; the child is asked to respond by indicating position on a five-point scale. Total score consists of the sum of the item scores, where five points are assigned to the most positive self-description.

The manual to accompany the instrument includes the rationale and purpose of the instrument; its construction, administration, and scoring; evidence for validity and reliability (internal consistency reliabilities range from .79 to .92 for various samples of children); and accumulated norm data.

INTENDED USERS AND BENEFICIARIES

The Purdue Self-Concept Scale for Primary Grade Children was designed for use in research and evaluation studies with children in grades 1, 2, and 3.

GOAL(S) OR PURPOSE(S)

The major goal is to provide a measure of the child's self-concept.

PATTERNS OF USE

This product is to be used in research and evaluation studies where improvement in self-concept is an expected outcome or side effect of educational treatment.

TIME REQUIREMENTS

This product requires approximately 30 minutes to administer.

ASSURANCES AND CLAIMS

There is no evidence to suggest that the use of this instrument would induce harmful effects in students. The materials do not appear to display any form of social bias, and ethnic or sexual stereotyping.

DEVELOPER/AUTHOR:

Purdue Research Foundation
West Lafayette, Ind. 47907

Victor G. Cicirelli, Project Director

AVAILABILITY

The Purdue Self-Concept Scale for Primary Grade Children **will be available in fall 1975 from:**

Victor G. Cicirelli
Department of Psychological Sciences
Purdue University
West Lafayette, Ind. 47907

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Test booklet	1 per student	To be announced	Consumable	
Manual	1 per district	To be announced	Reusable	

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 033

PURDUE SOCIAL ATTITUDE SCALES FOR PRIMARY GRADE CHILDREN

A paper-and-pencil instrument for measuring attitudes towards peers, school, home, and community

This is an instrument suitable for use with young children in grades 1, 2, or 3. It is designed as a paper-and-pencil instrument to be administered to small groups of children.

The *Purdue Social Attitude Scales for Primary Grade Children* was developed as a semiprojective device. The projective feature consists of presenting unstructured and incomplete picture stories in three cartoon frames, with the fourth frame containing five stylized faces depicting feeling tones ranging from very positive to very negative. By asking the child to indicate how each story should end, a projection of the student's own thinking, identification with the story character, and investment of self in the situation presented will be determined.

The instrument consists of 40 items. There are 10 picture stories in each of 4 content areas concerned with attitudes toward peers, school, home, and community. The child responds to each item on a five-point scale. Subscores consist of the sum of the 10 item scores in a given area, with 5 points assigned to the most positive attitude, while total score consists of the sums of all 40 items.

The manual to accompany the instrument includes the rationale and purpose of the instrument, its construction, administration and scoring, evidence for validity and reliability (internal consistency reliabilities range from .59 to .71 for the subscores and from .88 to .90 for the total score for various samples of children), and accumulated norm data. The instrument is intended for group comparisons in research and evaluation studies, not for individual diagnosis.

INTENDED USERS AND BENEFICIARIES

The product was designed for use in research and evaluation studies of children in grades 1 through 3.

GOAL(S) OR PURPOSE(S)

The goal of this product is to provide a measure of the child's attitudes toward peers, school, home, and community.

PATTERNS OF USE

This product is to be used in research and evaluation studies where improvement of the child's attitudes is an expected outcome or side effect of educational treatment.

TIME REQUIREMENTS

This product requires approximately 30 minutes to administer.

ASSURANCES AND CLAIMS

There is no evidence to suggest that the use of this product would induce harmful effects in students. The materials do not appear to display any form of social bias, ethnic or sexual stereotyping.

RD 130 033

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Purdue Social Attitude Scales for Primary Grade Children				
Test booklet	1 per student	To be announced	Consumable	
Manual	1 per district	To be announced	Reusable	

DEVELOPER/AUTHOR:

Purdue Research Foundation
West Lafayette, Ind. 47907

Victor G. Cicirelli, Project Director

AVAILABILITY

The *Purdue Social Attitude Scales for Primary Grade Children* will be available in fall 1975 from:

Victor G. Cicirelli
Department of Psychological Sciences
Purdue University
West Lafayette, Ind. 47907

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 034

RACIAL ATTITUDES SURVEY INSTRUMENT

An instrument which measures student racial prejudices as a function of inschool interaction

This instrument is intended to measure the racial attitudes of teenage students while controlling the amount and type of interracial contact which the student has experienced. The instrument is intended for use in desegregated schools in which administrators want to learn how students of different races view one another. The instrument can also be used to determine the contexts in which students of different races interact.

The instrument was designed in accordance with the assumption of social contact as a technique to reduce prejudice. Contact theory argues that simply bringing people of different races together may lead to heightened prejudice unless certain conditions for positive interaction are met. Among the most important conditions necessary if interracial contact is to reduce negative stereotypes and prejudices is the need for mutual dependence in the pursuit of common objectives. In schools, mutual dependence often involves activities such as athletics, clubs, and musical groups. By measuring the amount of interracial contact in several activities and correlating contact with racial attitudes, knowledge can be gained about aspects of a school's program which promote racial tolerance.

The survey instrument can be completed by students working at their own speed. The teachers' role is simply that of giving instructions and occasionally defining words. Because of the vocabulary used, the instrument probably cannot be used with students who have not reached the 8th grade. Depending on the reading skills of the students, the survey requires between 25 minutes and 1 hour.

SUBJECT AREA(S)

Evaluation, and administration.

This instrument, since it is not restricted to particular subject areas, can be used by school administrators and teachers in assessing the state of race relations in their school. Survey results may be useful in structuring activities in the school.

INTENDED USERS AND BENEFICIARIES

The survey instrument is designed to be completed by students in grades 8 to 12 in biracial schools. Some students in grade 8, however, have encountered difficulties in completing some portions.

GOAL(S) OR PURPOSE(S)

School authorities will be able to use survey results: (1) To determine the levels of racial hostility in their schools, (2) to identify students evincing high levels of racial hostility, and (3) to encourage students to participate in activities which are associated with racial tolerance in their schools.

PATTERNS OF USE

The survey instrument is used to determine racial attitudes and types of interaction associated with positive attitudes.

ASSESSMENT PROVISIONS

This is not intended as a learning exercise for students. School officials may find bivariate relationships of interest; however, the instrument is designed to be analyzed through factor analystic techniques.

TIME REQUIREMENTS

Depending on their vocabulary and reading levels, students can complete the instrument in 25 minutes to 1 hour.

IMPLEMENTATION PROCEDURES

Nothing special is required.

ASSURANCES AND CLAIMS

No assurances or claims can be made until the surveys which have been conducted are fully analyzed.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Survey instrument	1 per student	To be announced	1 use only	

DEVELOPER/AUTHOR:

Charles S. Bullock III
Project Director
Department of Political Science
University of Georgia
Athens, Ga. 30602

AVAILABILITY

The *Racial Attitudes Survey Instrument* is unavailable at this time.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 035

CLASSROOM OBSERVATION SYSTEM

A set of instruments measuring attitudes and interpersonal behavior of teachers and students.

The *Classroom Observation System* is a method trained personnel can use to analyze the functioning of any particular classroom. The analyses derived from this system are most valuable for teacher evaluation and development. Classroom observers will use three components:

1. Classroom observation record—This is an extension of Ryans' scales for describing teacher and student behavior (Ryans, *Characteristics of Teachers*, 1960). Three teacher scales (clarity of speech, cognitive level of lecturing, and of questioning) and four student scales (time on task, cognitive level of presentations, controlled behavior, and happiness) are added. (Interjudge reliability of scales, .70-.97, with median of .88.) A second part of this record is a systematic guide for preparing a verbal description of the content and conduct of the class during the observation period.

2. Student ontask coding system—This records the proportion of time selected students are attending to work. The record is taken at 1-minute intervals for up to 6 pupils; it is taken less frequently if a larger number of pupils is observed. (Interjudge reliability, .85 for two observers.)

3. Student critical incident form—This is a system of categories for describing an important example of an individual student's behavior: Whether alone or interacting; whether the incident illustrates primarily a cognitive, affective, or coping style issue; level of academic effort; cognitive skill level; attitude; autonomy; and peer relations. A detailed verbal description of the incident completes the report.

While each of the components can be used separately, a more complete and useful picture is obtained, with only a moderate increase in the time required, when all three procedures are used together. This describes the teacher's behavior, the behavior of the students as a whole, and the detailed behavior of a sample of students selected either randomly or by a predetermined criterion. The result is a combination of highly reliable, quantitative scores, a detailed description of major events in the classroom, and a detailed record of the idiosyncratic behavior of selected students.

SUBJECT AREA(S)

Evaluation; teacher development.

This system is applicable to all subjects and to all levels from kindergarten to college. The system has been used, to date, in grades 4-7.

INTENDED USERS AND BENEFICIARIES

The *Classroom Evaluation System* can be used in all subject fields, at all levels from kindergarten through college. It is used by trained observers, preferably people with training and experience in teaching. A team of observers can be used or the system can be used directly by curriculum advisers, teacher consultants, or school administrators. The results can be used for individual feedback to teachers for their self-development and for help in diagnosing the special problems of selected students. Qualified consultants should perform such services.

The system could also be used by supervisory personnel as part of a performance review procedure, although the validity and possible side effects of such use would have to be carefully considered, in conjunction with the teachers.

Another application is the use of the system for teacher education at preservice and inservice levels. Individual results can be used for individualized training. Suitably disguised findings can be used as protocol materials in several kinds of training models; e.g., case studies, group discussions.

GOAL(S) OR PURPOSE(S)

The goals of this system are: (1) To identify the working styles, attitudes, learning-relevant personal characteristics, and interpersonal behavior of teachers and students; (2) to determine the distribution of such characteristics in selected groups of teachers and students; (3) to permit rigorous, quantitative tests of propositions about relationships between teaching behavior and student learning and between student behavior and student learning; (4) to provide detailed leads for improving the effectiveness of instruction in particular classrooms; and (5) to identify learning-relevant characteristics of individual students which may suggest ways to improve their learning, affective as well as cognitive, through appropriately individualized instruction.

PATTERNS OF USE

The patterns of use are specified under "Intended Users and Beneficiaries."

ASSESSMENT PROVISIONS

The user's manual for the system describes the procedures for assessing the reliability of observations. It also contains instructions and illustrative examples for assessing the adequacy and usefulness of the student critical incident form and the descriptive report on the teacher's conduct of the class.

TIME REQUIREMENTS

The observation period may be 30-50 minutes, depending on normal class length or user needs. An additional 10 minutes is required, after the observation, to make the ratings. The written description of key events in the class takes 20 minutes, on the average. A critical incident report on an individual student takes 10 minutes to prepare, on the average.

IMPLEMENTATION PROCEDURES

Observers should receive approximately 30 hours of training. About 3 hours is devoted to initial study and discussion of the rating and coding dictionaries. Thereafter, observers work in teams of two or three, observing a class session, completing the records on it, comparing their ratings, discussing discrepancies, and repeating this process until they reach a reliability for pairs of observers of .85. It usually takes 8-10 observations of different classrooms, and subsequent discussions, to achieve this level of reliability. Thereafter, a periodic quality-control check is made on the ratings and the descriptive reports.

Arrangements for the observations, their rationale, and intended use are worked out in advance with the teachers who are to be involved and the appropriate school administrators. Some kind of useful feedback to teachers and administrators should be carried out, maintaining all assurances of confidentiality and other individual safeguards that have been agreed upon in advance.

The system contains a user's manual that describes procedures for obtaining consent for specified uses, training personnel, and testing reliability and validity in new populations; it also has suggested procedures for using the results for several kinds of educational purposes.

ASSURANCES AND CLAIMS

Assurances

The presence of any outside observer causes active concern to most teachers. The notion of being evaluated normally generates great concern. It is, therefore, vitally important that an acceptable rationale and genuine personal safeguards be worked out, in advance, and thoroughly discussed with the teachers. If only the individual teacher is to receive the information from the observations, the threat of external evaluation is relatively minimized; but is is not entirely removed. The observer is, in fact, acting as an evaluator, even if the results go only to the teacher. Consequently, an essential part of the feedback system is the selection and training of observers and feedback consultants who will assure each teacher of considerate, constructive, and tactful treatment.

If observation results are to be used strictly as data for analysis of groups of teachers and students, whether for basic research or to serve practical purposes, complete confidentiality and anonymity can and should be maintained.

If any methods such as these were to be used to evaluate individual teachers for administrative purposes, the entire process of evaluation would require extremely careful, thorough understanding between teachers, administrators, and community representatives. Reliability and validity of evaluation measures are essential ingredients of a sound evaluation process, but they are scarcely sufficient to reassure teachers that the system is a fair one. The interpretation of findings and the uses to which they are put must also be just and must be seen to be just. Unless procedures are installed that guarantee a sound overall evaluation system, to the reasonable satisfaction of everyone concerned, it would be better not to use methods such as this observation system.

Undoubtedly, the best evaluation approach is one which aims at maximizing the effectiveness of each teacher, whether through self-guided development, helpful advanced training, or selective matching with situations and students to make the most of the teacher's particular talents.

Claims

The system has produced ratings with a reliability ranging from .70 to .97 on the various scales, with a median interjudge reliability between trained observers of .88. Previous research has shown significant positive relationships among these scales, student evaluations of teachers, and self-report descriptions by teachers themselves. Current research is relating these several kinds of measures, as well as measures of pupil cognitive gains and affective gains, in a sample of more than 80 teachers and 2,500 students, with results available in November.

This rating system is being continuously assessed by item analysis, factor analysis, validation against independent criteria, and other appropriate tests of its soundness and utility. The "Student On-Task Coding System" has an interjudge reliability of .85. It is included in the validity study just cited.

RD 130 035

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom observation record	1 set per class	Available Nov. 75	Consumable	
Student ontask code sheet	1 for each 6 students	Available Nov. 75	Consumable	
Student critical incident form	1 for each student to be studied	Available Nov. 75	Consumable	
User's manual including guide for report	1 per observer	Available Nov. 75	Consumable	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

Robert Peck, Co-Director
David Ryans, Research Consultant

AVAILABILITY

The complete system, with accompanying reliability and validity data, will be available by November 1975.

Distributor

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 036

PEER EVALUATION TO IMPROVE TEACHING

A text and workbook presenting innovative methods for evaluating teacher performance

This is a text and self-instructional workbook based on the observation that school organizations are atypical in the procedures they establish for evaluation of their participants' work. In most organizations, evaluation and lines of authority are either hierarchical (as in business or government organizations) or professional, i.e., evaluation is done by one's colleagues or peers (as in law and medicine). The evaluation of teachers' work shares aspects of both models but fits neither.

The textbook, *Peer Evaluation To Improve Teaching: Research, Process, Applications* (Dornbusch, Deal, Roper), summarizes research on evaluation and authority done by the authors and others in a variety of organizations (from hospitals and university faculties to a football team) and identifies the special problems of evaluating teachers' work. It presents the findings of research on teacher evaluation and identifies the steps in a process of peer, or collegial, evaluation.

In this process, two teachers join together to improve their teaching, using the following sequence: (1) Choosing a fellow teacher as a partner, (2) selecting criteria for effective teaching, (3) self-assessment, (4) pupil feedback, (5) classroom observation by partner, (6) structured conferences between peers, and (7) specific plans for improvement.

The text also presents procedures for adapting the peer evaluation process for use in hierarchical evaluation systems in schools and for use in the preservice training of teachers. Case studies and other data from field tests of the process are included. Also included are relevant forms and other materials from the workbook.

The workbook, *User's Guide to Peer Evaluation To Improve Teaching* (Dornbusch, Deal, Plumley), is a self-contained handbook for applying the process. It sets forth the need for new ways of evaluating teachers and the barriers to effective evaluation, describes the purpose of the peer evaluation program, and explains the seven steps in the process. Detailed instructions for each step, with appropriate forms, are provided. A summary section points the way to further improvements in the peer, or collegial, process.

SUBJECT AREA(S)

The subject areas are evaluation, preservice, and inservice teacher training.

INTENDED USERS AND BENEFICIARIES

The range of potential users includes more than 2 million active teachers as well as future teachers to be trained. The text can be used in professional education courses in student teaching, educational administration, social foundations of education, and curriculum and methods; it will also be of interest to school administrators in some 21,000 school districts. The workbook is expected to be used by preservice teacher trainees in the courses described above (particularly student teaching) and by practicing teachers in school systems.

GOAL(S) OR PURPOSE(S)

The teacher completing the workbook will have: (1) A better understanding of the tasks and goals of teaching, (2) an improved procedure for continued feedback, self-improvement, and professional growth, and (3) an insight into ways teachers can work together for purposes beyond evaluation of teaching. The school administrator using the text or coordinating use of the workbook will have acquired a new technique for evaluation of the teacher's work and a method for fostering teacher professional growth. The teacher trainer will have become aware of a new tool for improving the professional competence of students.

PATTERNS OF USE

The text may be used in the preservice college courses listed under "Intended Users and Beneficiaries" and may be read by administrators in the schools. The workbook can be used in college courses, in formal inservice training programs in schools, or at the initiative of teachers or administrators. Impetus for such use may come from teacher organizations.

ASSESSMENT PROVISIONS

Since the process is directly concerned with the evaluation of teachers' work, it contains its own built-in procedures for assessment. The structured conferences between teaching peers and the development of specific plans for improvement (the sixth and seventh steps cited above) provide concrete guidelines for changing the teacher's behavior in directions previously identified and accepted.

TIME REQUIREMENTS

The program set forth in the workbook can be completed in 8 to 10 hours. Time spent reading or discussing the text will vary with the emphasis given to it.

IMPLEMENTATION PROCEDURES

The workbook is self-contained and does not require use of the text, although the text provides additional insights. Full use of the process requires provision for observation in a teaching situation and for structured conferences between teachers. If the peer evaluation process is established as part of the school's formal evaluation procedures, organizational arrangements will need to be developed at the school and probably the district levels.

ASSURANCES AND CLAIMS

Assurances

The workbook portions of the process have been field tested with teacher trainees (interns) in the Stanford Secondary Teacher Education Program and with practicing teachers in the Pleasanton-Amador, Calif., school district. An abbreviated version of the process has been implemented in workshops held by SCRDT professional staff members for groups of California administrators and teachers. Feedback from these situations has indicated that the materials are transportable and replicable. No evidence of negative effects or social bias in the materials has emerged from the field tests or the workshops.

Claims

The field tests and workshops have produced positive reactions from their participants. Feedback from both sources is being incorporated into the final revision. Evidence of the potential appeal of the peer evaluation process is provided by the fact that the California Teachers Association distributed announcements of the March-April 1975 workshops to its members in the six-county San Francisco Bay area.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Peer Evaluation To Improve Teaching				
Text volume	1 per reader (not required for use of workbook)	Not determined	Reusable	Not determined
Workbook volume	1 per teacher or student teacher	Not determined	Consumed in each use; information pages retained for reference	Not determined

DEVELOPER/AUTHOR:

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

Sanford M. Dornbusch, Research and Development Associate
Terrence E. Deal, Research and Development Associate
Susan Roper, Research and Development Associate
Deborah Plumley

AVAILABILITY

The final revision of the text and workbook will be completed by late 1975. For further information, please write:

Director, Publications and Dissemination
Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 037

THE TEACHER CONCERNS CHECKLIST (TCCL)

A Likert Scale instrument which measures teacher motivations

The Teacher Concerns Checklist (TCCL) is an easily administered, quickly scored instrument which taps the major areas of concern of teachers. The checklist was originally developed for use in teacher training programs, but has since been used in several studies on inservice teachers.

Frances Fuller originally suggested that, in order to harness motivation for learning in teacher education programs, notice should be taken of the expressed needs and concerns of teachers. She also theorized that the prospective teacher goes through a developmental sequence of concerns during the teacher education program. Specifically, three types of concerns were identified: Concerns about self, concerns about task, and concerns about impact. It was hypothesized that concerns about self and concerns about task are less mature than concerns about pupil needs and that the latter gradually replace the former as the teacher progresses through teacher training.

The instrument itself consists of 56 Likert-scaled items, each of which describes a teaching concern. The instructions read: "When you think about your teaching, what are you concerned about?" This is followed by the leading statement, "I am concerned about" followed by the 56 items. For each item, five response alternatives are provided for the teacher to indicate the degree of concern over that item: (1) Not concerned, (2) a little concerned, (3) moderately concerned, (4) very concerned, and (5) totally preoccupied. Teachers relate to the format and content of the checklist which takes them only about 10 minutes to complete.

SUBJECT AREAS(S)

The subject areas are teacher education, needs assessment, program development, personalized feedback, individual counseling, and evaluation.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for use by teacher educators and teacher trainee counselors, the checklist has been used by researchers interested in teacher effectiveness.

GOAL(S) OR PURPOSE(S)

The goals of this product are: (1) To assess the needs of preservice teachers, (2) to evaluate the affective dimension of teacher training programs, and (3) to assess individual teacher's areas of immediate concern as an aid in counseling and feedback sessions.

PATTERNS OF USE

The checklist can be used repeatedly to assess the development of concerns as teacher trainees progress through a program, or one time only as an indicator of concerns at a crucial point (such as immediately before the first exposure to classroom instruction).

ASSESSMENT PROVISIONS

The checklist is an assessment device which can easily be incorporated into a wide variety of inservice and preservice programs. Use of the information provided by the checklist can be adapted to a wide variety of situations ranging from formal evaluation of a teacher education program to individual counseling in an inservice teacher workshop.

TIME REQUIREMENTS

The checklist requires about 10 minutes to complete. Scoring can be accomplished either by hand or with the aid of a computer. Hand scoring requires about 5 minutes per checklist. Interpretation of the scores has not been fully automated; making clinical judgments of the meaning of the scores is perhaps the most time-consuming aspect of the use of the instrument.

IMPLEMENTATION PROCEDURES

Access to keypunch facilities and a computer terminal can be very helpful if a large number of checklists need to be scored. A computer program for scoring the checklist and printing out limited diagnostic information will be available in the near future. Interested users may wish to adapt this program to their local computer, or make arrangements with the third author to mail in checklists for processing.

ASSURANCES AND CLAIMS

Assurances

The checklist has been in use for several years. More than 2,000 preservice and inservice teachers completed the instrument or an earlier version during its development. The authors have every reason to believe that item content is relevant to teachers and representative of the concerns they have. A number of independent studies are currently underway which incorporate the checklist as an index of development during teacher training. Thus, it is apparent that researchers not connected with the instrument's development have seen the usefulness of the measure.

Claims

The checklist has been shown to be highly reliable in a 2-week test-retest situation. Each subscale has a high internal reliability and the total score is a stable index of overall level of concern.

The authors have some reservations about the external validity of the measure. No other reliable measure of the phenomena under consideration exists, so external validity is impossible to firmly establish. The authors are currently collecting data which may reflect on the validity of the measure, but results of this investigation will not be available before spring 1976.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Checklists	1 per teacher	4.00 per 100	Replaced each use	Reproduced by consumer
Instruction booklet	1	1.00	Reusable	
Computer program for scoring	1	10.00	Reusable	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

Frances F. Fuller, Research Director
James Watkins, Research Associate
Archie A. George, Research Associate

AVAILABILITY

Copies of the checklist are currently available. The scoring manual and computer program will be available in fall 1975. For these materials and additional information, write to:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.207
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 038

TEACHER ASSESSMENT SYSTEM

An assessment system using self-report instruments to give personalized feedback to each teacher

This four-instrument system obtains self-report data from teachers on salient features in their life histories, perceptions of themselves as individuals, perceptions of the problems, pleasures, and effects of teaching, and preferred ways of coping with school issues. The Biographical Form, Adjective Self-Description, and Directed Imagination have been developed, field tested, revised, and validated in a continuing series of applications since 1962. Views of Teaching, a measure of teacher coping style and teaching-relevant attitudes, was used first in 1969 in a revised form; it is undergoing field testing which will be completed in 1975.

While each of the instruments can be used separately, research has found that they measure different, relatively nonoverlapping characteristics which, together, provide a multidimensional profile that has proved significantly related to independent measures of teaching behavior and pupil learning.

SUBJECT AREA(S)

Subject areas are evaluation, teacher training, administration, and counseling.

INTENDED USERS AND BENEFICIARIES

The system can be used: (1) By counselors to give personalized feedback to a teacher, to aid in self-development; (2) as a guide to teacher educators in preservice and inservice training, to facilitate individualized instruction; and (3) as an aid to school administrators in working out teacher-class pairings that are likely to increase student learning and teacher satisfaction.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to aid in teacher self-development and to aid school administrators in working out teacher-class pairings that are likely to increase student learning and teacher satisfaction.

TIME REQUIREMENTS

The maximum completion time for each part is: Biographical Form, 25 minutes; Adjective Self-Description, 10 minutes; Directed Imagination, 20 minutes; and Views of Teaching, 30 minutes.

IMPLEMENTATION PROCEDURES

All instruments can be completed at times and places chosen by the individual teacher; no supervision is required. Scoring of the instruments can be done by testing assistants or similar members of a school personnel staff with moderate professional training. A scoring manual for each instrument forms part of the system.

ASSURANCES AND CLAIMS

Assurances

Both the protection of the personal rights of teachers and the validity of their responses to the instruments depend on careful safeguards in the scoring, interpretation, and accessibility of individual results. In principle, teachers who are asked to respond to the instruments should be told exactly who will have access to the results at any time and what measures will be taken to insure that there can be no unauthorized access to the data by anyone other than those identified to the teachers in advance. Detailed instructions for safeguarding confidentiality are contained in the user's manual for the systems.

Three of the instruments have been used as part of a personalized feedback system with several thousand preservice student teachers in many parts of the United States since 1962. In this application, a faculty level counselor interpreted the test results to the teachers. In most situations, selected findings were also communicated to other members of a faculty team, to assist them in tailoring the individual student's training. In numerous evaluation studies, the teachers' reactions have been predominately favorable; the relatively few individual objections have almost never included assertions of personal harm or unfairness.

When used in research to relate teacher characteristics to other measures of teaching behavior (such as the center's classroom observation rating system) or to measures of student gains in cognitive and affective respects (see the center's pupil assessment system), complete individual confidentiality has been assured.

No risk of harm or unfairness has arisen in this application. The system will be fully replicable and transportable by November 1975.

Claims

In two studies with different samples of inservice teachers, scores from the assessment system have correlated between .50 and .90 with highly reliable (.90) observation-based ratings of classroom teaching behavior. In another study, the assessment scores correlated significantly with pupil gain scores and with student evaluation of teaching scores. In a large-scale current study involving 84 teachers and 2,600 children, the assessment scores are being correlated with classroom observation scores, with pupil ratings, and with pupil gains on 6 aspects of cognitive and affective learning, emotional adjustment, and coping skills. The results will be available by November 1975. The instruments in the system have been repeatedly tested, revised, and retested over a period ranging from 1962 to 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Copies of 4 instruments	1 set per teacher	Available Dec. 75	Consumable	
Copies of scoring manuals	1 set per school	Available Dec. 75	Reusable	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

Robert F. Peck, Codirector
Donald J. Veldman, Research Consultant

AVAILABILITY

All instruments and the user's manual will be available by November 1975. Order from:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 130 039

TEACHER AFFECTIVE SENSITIVITY SCALE (TASS)

A validated simulation device measuring a teacher's ability to identify verbal and nonverbal emotions expressed by a student

The *Teacher Affective Sensitivity Scale* (TASS) is a validated simulation device that measures a teacher's ability to identify verbal and nonverbal emotions expressed by a student (teacher affective sensitivity). The instrument consists of video taped excerpts of teacher-learner interactions in classroom settings. Subjects responding to the instrument are asked to identify (via multiple-choice responses) the emotions felt by the student during each video tape episode.

Sample Lesson

(Addressed to Respondents)

You will be viewing scenes of classroom sessions. Your task is to identify the feelings that particular students were experiencing when the video taped episodes were filmed.

The multiple choice items listed below consist of three responses. Each video taped scene that you will be viewing has two corresponding multiple choice items. The first item per scene focuses on the student's feelings about self or the subject. The second item focuses on the student's feeling about the teacher and/or the other students in the classroom.

After you view each scene, read the two multiple-choice items and ask yourself the following question. If the student were to view this same scene and were able to be completely open and honest (i.e., could identify personal feelings), which of these responses would be used to describe those feelings?

After you have selected the response that you believe most accurately describes what the student was feeling, indicate your choice on the answer sheet.

Sample Item

1. At the end of this scene, the feelings I have about myself and/or the subject matter are:
   a. I don't know what to say. I wish I could get away from here.
   b. Great! Now I've got him/her. He/she is going to do what I want.
   c. I don't like myself very well. I never seem to do the right thing.
2. The feelings I am experiencing concerning the teacher and/or the student with whom I have been interacting are:
   a. The teacher is disappointed in me, but I guess he/she wants to help.
   b. I don't think you're interested in me.
   c. You're always too busy to talk.

SUBJECT AREA(S)

The subject area is preservice and inservice teacher training.

INTENDED USERS AND BENEFICIARIES

The intended users are teacher educators, preservice and inservice teachers, and counselors.

GOAL(S) OR PURPOSE(S)

The teacher taking the TASS will be able to identify verbal and nonverbal emotions expressed by students (as depicted on the video tape) and to select the answer from each multiple-choice item that most accurately describes the affective state of the pupil viewed on the screen.

PATTERNS OF USE

For ease of use, the film episodes depicted on the TASS, along with the accompanying multiple-choice items, should be viewed sequentially.

Numerous training techniques aimed at developing interpersonal skills have been implemented for teacher preparation and inservice programs during the past few years (Carkhuff, 1969, 1971; Berenson, 1971; Blakeman and Emener, 1971; Gazda, 1971). To analyze whether these techniques are able to meet their specified program objectives (e.g., to help teachers to be more understanding and sensitive to feelings of others), a measurement device is needed. The *Teacher Affective Measurement Scale* can provide data useful for this type of program evaluation.

As the teaching market has progressively tightened on a national basis, preservice institutions have given increased consideration to the establishment of student selection, as well as program implementation criteria. If one of these criteria focuses on teacher sensitivity and concern for other human beings, or some other related objective, the scale could be utilized to assess this dimension. This application of TASS may produce some much-needed information for training institutions.

The *Teacher Affective Measurement Scale* could be used as a training device. If awareness is one of the prerequisites of behavior change, then it is conceivable that a teacher's understanding of his/her current level of affective sensitivity may serve as a catalyst for the improvement of this psychological dimension. Utilization of TASS for training purposes will require further development and evaluation to appraise the resulting outcomes.

ASSESSMENT PROVISIONS

A scoring key accompanies TASS.

TIME REQUIREMENTS

Approximately 45 minutes of respondent viewing/answering time is required.

ASSURANCES AND CLAIMS

The following selection and editing criteria were utilized to formulate TASS. Thus, it reflects these specifications.

Previously recorded media (films and video tapes) depicting classroom interactions were viewed and analyzed by the recorder to obtain 50 examples of various learner affective expressions. All of these recordings had been purchased by the Audio-Visual Center at Washington State University. The following criteria were employed to guide the selection of the needed excerpts.

1. The video tape excerpts are representative of a diverse array of human emotions.
2. For each basic emotion, a series of excerpts is included which represents increasing levels of the emotion.
3. A variety of student grade levels ranging from K to 12 are depicted on the video tape.
4. Both male and female students are represented on the video tape excerpts.
5. Students from different racial and ethnic backgrounds are depicted on the video tape.

Once video tape selections were made, an additional set of standards (editing criteria) was used to evaluate the media episodes. Each excerpt was analyzed by the investigator and a media specialist to insure that it met the following editing specifications:

1. The sound quality of each episode is such that the recorded learner-teacher interactions are clearly audible to subjects viewing the video tape.
2. The sound track of each episode is synchronized with the physical picture on the video tape.
3. The physical image (picture) portion of each episode is clearly visible to subjects viewing the video tape.
4. The timing and duration of each episode insures that essential aspects of the learner's behavior are included on the video tape.
5. The video tape is free of splicing defects.

Evidence is presented in this study that teacher affective sensitivity is an important factor influencing the learning that transpires in the classroom and a measurable psychological construct. At no point, however, is affective sensitivity described as the sole constituent of teaching effectiveness. Such a statement would be unrealistic and irresponsible. The investigator concludes that many aspects are available for further study and need to be explored. It is assumed that this research will provide impetus for the continued theoretical and methodological investigation of teacher affective sensitivity and the vast number of additional variables associated with the teaching-learning exchange.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Sony EIAJ (new format video tape player), 1/2 inch	1 per school	Not available	Reusable	
TV monitor	1 per school	Not available	Reusable	
Multiple-choice test accompanying video tape excerpts	1 per teaching unit	50.00	Reusable	

DEVELOPER/AUTHOR:

Constance H. F. Kravas
Washington State University
Pullman, Wash. 99163

AVAILABILITY

For further information about the availability of the TASS, contact:

Constance H. F. Kravas
262 Cleveland Hall
Washington State University
Pullman, Wash. 99163

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 040

ISSUES AND PROCEDURES IN THE DEVELOPMENT OF CRITERION-REFERENCED TESTS: ERIC/TM REPORT 26

A paper providing a nontechnical discussion of issues and procedures in the development and use of criterion-referenced tests

This product discusses the basic steps and procedures in the Development of Criterion-Referenced Tests (CRT's), as well as the issues and problems associated with these activities. In the first section of the paper, the discussions focus upon the purpose and defining characteristics of CRT's, item construction and selection, improving item quality, content validity, item and test bias, test scores, packaging, and other considerations. In the second section, the results of a survey conducted to assess current efforts in criterion-referenced testing are summarized. Five defining characteristics—program focus, instructional dependence, objective and item generation, test models and packaging, and test scores—are provided for representative criterion-referenced testing programs. From this analysis, 10 questions that the CRT developer must answer in order to clarify the nature and purpose of a CRT are provided.

SUBJECT AREA(S)

Subject areas include evaluation, development, and use of criterion-referenced tests.

INTENDED USERS AND BENEFICIARIES

Teachers, educators, school administrators, program evaluators, curriculum specialists, and graduate students are intended users of this report. Primary beneficiaries are curriculum specialists, program evaluators, and other educators considering the use of criterion-referenced tests.

GOAL(S) OR PURPOSE(S)

To provide a nontechnical discussion of the salient issues and essential procedures in the development and–use of criterion-referenced tests.

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of experts in measurement and criterion-referenced testing. The authors incorporated these comments and suggestions into a second draft which was reviewed in a similar manner.

Since its publication in 1973, permission to reprint was requested by an editor of a book of readings in educational and psychological measurement. The paper was also included as an article in the 1974-75 *Education Yearbook* published by Macmillan. The paper has been used as a text and required reading in a number of graduate courses in educational measurement and continuing education courses for program evaluators, test developers, and school administrators.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

Stephen P. Klein, Author
Jacqueline Kosecoff, Author

AVAILABILITY

Issues and Procedures in the Development of Criterion-Referenced Tests was published in December 1973. The report is not copyrighted. Order No. ED 083 284, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

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P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 041

OPENING INSTITUTIONAL LEDGER BOOKS—A CHALLENGE TO EDUCATIONAL LEADERSHIP: ERIC/TM REPORT 28

Methods of reporting test results to audiences lacking sophistication in measurement

Explaining test results to groups of teachers, school board members, parents, and the communications media can be a very difficult and forbidding experience. This product outlines procedures for developing a public understanding of why tests are administered in the schools, the kinds of tests that are used, and the interpretation of different kinds of scores and statistics. Suggestions are made for increasing the effectiveness of presentation of test results through preplanning and discussing test data in terms of topics which are meaningful to the audience (such as the identification of pupil needs, the relationship between test results and instructional programs, and problems which the school and the community must address). Sample tables and charts are presented to serve as models for ways of presenting statistical data in an easily comprehensible, graphic format.

SUBJECT AREA(S)

Subject areas include evaluation, communication, and dissemination of test results.

INTENDED USERS AND BENEFICIARIES

The intended users are educators, school board members, researchers, and instructors of courses in educational measurement, and their students. Primary beneficiaries are individuals who need assistance in reporting test results to an audience that lacks sophistication in measurement.

GOAL(S) OR PURPOSE(S)

To provide guidelines for effectively communicating the results of a testing program to parents, school board members, the media, and community groups.

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of measurement experts for review. The author incorporated these comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

Edwin P. Larsen, Author

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RD 130 042

PROCEDURES AND ISSUES IN THE MEASUREMENT OF ATTITUDES: ERIC/TM REPORT 30

A guide to the design, construction, scoring, and interpretation of original scales to measure attitudes

Procedures and Issues in the Measurement of Attitudes is a 13-page guide to the design, construction, administration, scoring, and interpretation of original scales to measure attitudes. This overview is designed primarily for novice researchers, graduate students, and program evaluators who lack expertise in psychometrics and who may not have a clear conception of the nature of an attitude. To remedy this deficiency, there is a basic discussion of: (1) The nature of attitudes; (2) the relationship between attitudes and similar constructs such as beliefs, opinions, and personality traits; (3) the relationship of attitudes to behavior; (4) the measurable characteristics of attitudes; (5) basic criteria for the adequacy of attitudinal measures; and (6) a comparison of the semantic differential, Thurstone, Likert, and Guttman approaches to attitude measurement. The construction of attitude scales is discussed in terms of the development and construction of items, initial data collection, reliability, and validity. Guidelines are presented for administering, scoring, interpreting the results, and reporting the data.

SUBJECT AREA(S)

Testing is the subject area of this guide.

The construction, administration, scoring, and use of original questionnaires are presented.

INTENDED USERS AND BENEFICIARIES

The intended users of this guide are educators, program and project directors, graduate students, and instructors of courses in tests and measurements. Primary beneficiaries are individuals who lack a strong background in psychometrics but are faced with the task of constructing a questionnaire.

GOAL(S) OR PURPOSE(S)

The goals of this guide are: (1) To discuss issues relevant to the nature of attitudes, (2) to refer the reader to works indexing a variety of existent attitude scales; and (3) to discuss comprehensively, but nontechnically, the way in which attitude scales are constructed, administered, scored, interpreted, and reported.

ASSURANCES AND CLAIMS

The initial manuscript was submitted to a number of measurement experts for review. The author incorporated their comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

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Princeton, N.J. 08540

Lawrence J. Severy, Author

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 043

A COLLECTION OF CRITERION-REFERENCED TESTS: ERIC/TM REPORT 31

An annotated bibliography of 21 criterion-referenced tests

This product is an annotated bibliography describing 21 criterion-referenced tests in terms of the trait, ability, or skill being evaluated; format for administration; response mode; scoring procedures; and technical and supportive data. All criterion-referenced tests are not cited. The tests cited are characteristic of the variety of tests that have been labeled "criterion-referenced." In addition to the test descriptions, the author presents a brief discussion of the advantages, limitations, and uses of such tests.

SUBJECT AREA(S)

The subject areas are evaluation and criterion-referenced tests.

INTENDED USERS AND BENEFICIARIES

The intended users are program evaluators, curriculum specialists, measurement and evaluation specialists, and others investigating the possibility of using criterion-referenced tests. Primary beneficiaries are those involved in program and curriculum evaluation.

GOAL(S) OR PURPOSE(S)

The major goal is to provide a descriptive overview of the variety of tests which are labeled "criterion referenced."

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of measurement experts for review. The author incorporated their comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 130 044

EVALUATION DESIGNS FOR PRACTITIONERS: ERIC/TM REPORT 35

Four evaluation designs used in school inservice settings

Whether a project concerns the program of an entire school system or the day-to-day practice of a teacher in a single classroom, planning and implementing any facet of the educational program calls for decisionmaking. The interactive nature of the educational process produces a dynamic environment; hence, decisions made at one point in time require reassessment at the next point in time before another round of decisions can begin. Evaluation provides a framework for building a systematic data base to aid in making decisions in school and classroom practice. With an appropriate data base, problems can be reformulated; both potential and actual consequences can be analyzed; and, as a result, the processes can be redirected.

Practitioners are not afforded the luxury of ideal laboratory conditions. The natural settings of the classroom, school, or school system place constraints upon the type of data which can be obtained; educators must work with less than an ideal experimental design.

This product describes four evaluation designs used in their natural settings. Each involves an evaluation study that takes into account a variety of constraints, but nevertheless provides a basis for subsequent program and/or organizational decisions. The four evaluation designs are: (1) A true experimental design that necessitates the random assignment of students to experimental and control groups, (2) a nonequivalent control-group design, (3) a time-series design, and (4) a noncomparative group design.

SUBJECT AREA(S)

Evaluation and the design of research and evaluation programs for use in natural settings of the classroom, the school, or the school system.

INTENDED USERS AND BENEFICARIES

The intended users are program evaluators, educators, educational researchers, program monitors, and graduate students. Primary beneficiaries are educators who are not well versed in research design, but who wish to design effective evaluation studies.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To outline four evaluation designs which can be used effectively in natural school settings and (2) to emphasize the application of good evaluation data to informed decisionmaking.

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of evaluation experts for review. The authors incorporated their comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

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Educational Testing Service
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Maurice J. Eash, Author
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Herbert J. Walberg, Author

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FINANCE, PRODUCTIVITY, AND MANAGEMENT

1044

OVERVIEW

ELISSA FELDMAN
Research Specialist
School Finance and Organization Division
Finance and Productivity Group
National Institute of Education
Washington, D.C.

The problem

American educators and education policymakers face a host of pressures that are often contradictory, but reflect the changes in our society that are affecting all of our public institutions. Popular demands for more effective education are now accompanied by public disagreement over the proper goals of education and the most appropriate way to measure outcomes. State and Federal judicial actions have given rise to a nationwide movement for taxpayer equity and equality of educational opportunity, while recent research casts doubt on the assumed relationships between school resources and student achievement. Declining enrollment and rampant inflation place new demands on the creativity of our educational institutions, while with each passing year the confidence of American citizenry in their public institutions diminishes, with an attendant loss of commitment to finance these services.

These conditions argue for conducting research for education decisionmakers which will deal with financing education—both the generation and allocation of funds; with management—organizing human and financial resources to most effectively deliver education; and productivity—maximizing the benefits of each dollar spent for education.

Overview of the field

Although State and local policymakers have long been concerned with reforming school-financing arrangements, the past 5 years have evidenced a marked awareness of existing disparities in raising and spending funds. Beginning with the California Supreme Court *Serrano v. Priest* decision in 1971, which held that fiscal disparities among local districts based on wealth violated State constitutional requirements, a series of Federal and State court decisions questioning the validity of existing financing arrangements have ensued. State legislatures now find themselves struggling to reform their existing tax and education finance laws to provide greater student and taxpayer equity. These debates have raised a series of difficult questions: Do existing tax structures provide an appropriate base for fiscal equality? Is equity synonymous with equal dollar expenditures for all children despite differences in costs, needs, and district size? Is it possible to distribute existing revenues more equally or will additional revenues be required?

The impact of the State-based finance reform movement is growing: to date more than 14 States have enacted major revisions in their school-finance laws; research on a host of finance issues has been initiated by the Federal Government, State legislatures involved in the reform process, university research institutions, and organizations representing State policymaking and educational interests. Despite increasing interest in the field, a variety of issues requires further investigation, including (1) questions of education cost differentials, encompassing urban and rural differences, teacher-salary disparities, varied costs of individualized services, and traditional expenditure disparities between primary and secondary students; (2) the potential benefits of greater State assumption of school support and the impact of such proposals on local community control; (3) expenditure disparities within districts as opposed to those which exist between districts; and (4) the effects of changing tax structures to rely more on personal and corporate income than on property wealth.

At roughly the same time that the courts and legislatures have begun to focus on basic issues of school finance equalization, the social and economic context in which policy is being made has begun to change shape. Education research and evaluation in the past few years have poked large holes in widely held assumptions that increased resources lead to increased outcomes, i.e., that schools with more money will produce students with higher test scores. In the face of *Serrano* and successive cases which assume that equalizing resources will equalize outcomes, policymakers are increasingly looking at the organization and management of the schools for factors which influence student performance.

The complex nature of the issues currently facing American public education is further compounded by a steady downward trend in school enrollments, an accompanying oversupply of teachers, a high rate of inflation, and a growing unwillingness of taxpayers to pass school-bond issues. Consequently, questions of improved school efficiency and productivity are foremost in the minds of educators and education policymakers. Expenditures on education have increased more than tenfold in the past two decades (from $9 billion to $96 billion), and since 1950 the fraction of the gross national product devoted to education has risen from 3.4 to about 7 percent. While higher enrollments and retention rates have

Ms. Elissa Feldman has been associated with federally sponsored education voucher projects at the Office of Economic Opportunity and the National Institute of Education. Her current responsibilities include monitoring of service-oriented projects in the areas of State and local school finance and management.

FINANCE, PRODUCTIVITY, AND MANAGEMENT

been a major source of increased expenditures, much of the increase derives from increased unit costs of education, largely caused by rising teacher salaries and fringe benefits and decreasing pupil-teacher ratios. There is little evidence, however, that these increased expenditures have improved the effectiveness of education. Some of the low productivity in the educational sector may be attributable to the use of inefficient processes for which equally effective less expensive processes could be substituted.

A systematic approach to raising educational productivity requires agreement on the desired outputs of education, adequate methodology to measure and compare them, and a better understanding of the way in which student outcomes and inputs interact.

NIE products and the field

The Finance and Productivity Division inaugurated research in these areas in fiscal year 1976. NIE products listed in this publication are primarily oriented toward management techniques and practical organization questions. Future publications will catalogue new products in the broader area of finance and productivity as the results of more recent research become available.

Current work in this area can be characterized as follows:

- Developmental service-oriented school-finance research products to inform education policymaking at both the State and local level;
- Policy studies of the alternative ways States have responded to finance issues arising from recent court decisions;
- Analyses of the impact of shifting enrollments—both declining and increasing—on school districts' abilities to manage resources and organize the delivery of educational services in the face of fluctuating demands;
- Studies of issues faced by States and LEA's as they consider competency-based education, where the conferring of education credentials is based on skills or knowledge individuals have demonstrated;
- Exploration of assessment techniques designed to enhance the usefulness of evaluation research findings to practitioners and educational decisionmakers;
- Models of school-district organization which increase productivity by improving the efficiency of the delivery of educational services.

RD 140 001

COST-EFFECTIVENESS GUIDE FOR ADMINISTRATORS

A handbook for a cost/benefit analysis of an alternative curriculum

Cost-Effectiveness Guide for Administrators is a handbook designed to help school personnel make curriculum program-selection decisions based on a consideration of cost and effectiveness. This assistance is given by providing a process for gathering information regarding the relative cost and effectiveness of alternative programs and then making comparisons among them. Any school personnel involved in curriculum program selection would find the handbook useful.

The topics covered in the handbook include: specifying the curriculum change desired, specifying general program selection criteria, identifying curriculum programs that meet general selection criteria, identifying specific selection criteria with the option of assigning relative weights to the criteria, gathering detailed cost and effectiveness information on feasible program alternatives, comparing alternative programs, and selecting a curriculum program for adoption or adaptation.

The product consists of two looseleaf notebooks: One for the project manager or leader of the curriculum selection effort in a school district and one for all members of the curriculum selection committee. The notebooks are divided into appropriate task units for ease of use. Each unit contains use management instructions, text, examples, exercises where needed, and worksheets and/or information sheets for application of the procedures taught to the district's own curriculum-selection effort. The product is designed for group use, but it can be easily adapted to individual use.

SUBJECT AREA

Evaluation, administrative planning, and curriculum selection.

The product emphasizes group involvement in the systematic collection and analysis of information on alternative curriculum programs. The procedures allow school district personnel: (1) To carefully specify the criteria by which they will select a "best" program for them, (2) to gather detailed cost and effectiveness information on alternative programs, (3) to compare and select a program, and (4) to document the selection process and final program choice.

INTENDED USERS

The product is intended for use by any school personnel involved in the selection of a curriculum program. This includes central office administrators, building level administrators, and teachers.

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school districts make curriculum selection decisions on the basis of realistic cost and effectiveness information. This is accomplished by providing users with a systematic method for gathering information, comparing programs, and making a final program selection.

PATTERNS OF USE

The material is self-contained requiring no specially trained individual for use. The material is organized according to the major tasks of a curriculum selection effort and should be used sequentially with each of those tasks. In this manner, the product facilitates the group performance of the several tasks.

Although the product is self-contained, users may choose to obtain outside consultation or help in their curriculum selection effort from the developers. In addition, the basic process employed in the materials can be adapted to other decision situations in a school district.

ASSESSMENT PROVISIONS

A series of checklists is included in the product so that the project manager can monitor each task in the curriculum selection effort.

TIME REQUIREMENTS

The material takes approximately 8 hours to complete. The total time required for selecting a curriculum program will vary greatly depending upon the time it takes a district to gather the cost and effectiveness information desired on each curriculum program under final consideration.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a district to use the product. It is recommended, however, that one person direct the use of the materials in curriculum selection in a district. The product is best used by a small group rather than an individual or large staff.

Personnel Required for Product Adoption and Implementation

The product can be used by a single individual or a committee of three to seven district staff without any previous training in curriculum program selection. Districts can choose to obtain consultation and other services from the developer. Cost for different services can be obtained from the developer.

ASSURANCES AND CLAIMS

The subject of the product is rational decisionmaking procedures for use in selecting curriculum programs. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

Steps are being taken to ensure that the product excludes social bias. During the pilot testing of the prototype version, several RBS staff not involved directly in the development of the product reviewed it for social bias using an NIE rating scale. A few incidences of bias were identified and are being corrected.

The pilot test of the prototype involved school personnel of varied training and experience. Later formative evaluation will involve different school districts and varied personnel to help verify that the product can be generalized and transported.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Volume I	1 per project manager	To be announced	Consumable	
Volume II	1 per user	To be announced	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The prototype version of the product has been completed and tested. The product is currently being revised and will be available in spring and summer to field-test sites. Completion of the final product is scheduled for November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

COST EFFECTIVENESS TECHNIQUE

RD 140 002

A cost-effectiveness model for assessment of a basic elementary school skills curriculum

The purpose of this study was to demonstrate the feasibility of a cost-effectiveness analysis approach. Eight instructional alternatives within three primary reading programs were studied in the Louisville, Kentucky, Public Schools. Data collected covered program description and implementation, student characteristics, effectiveness measures, and costs. Program implementation data were used to adjust effectiveness measures. Students were grouped using characteristic data. By dividing the mean adjusted effectiveness measures by the per-pupil program costs, a set of cost-effectiveness ratios was calculated which could be used to compare programs.

The study generated information which indicates the possible feasibility of the approach. The utilization of three of the four data types suggested in determining the cost effectiveness of instructional programs was successfully implemented. The utilization of a fourth type, implementation data, was not adequately accomplished. Therefore, the feasibility of the approach was not completely demonstrated. However, the study does suggest a high likelihood of feasibility and has pinpointed areas of implementation difficulties. It is hoped that the results of this effort, both negative and positive, will assist in the development of a cost-effective methodology which can be utilized by the education practitioner.

The final report presented the cost-effectiveness model in a manner which would permit direct implementation if the implementer has established or can establish a data base which collects and maintains data on program design, program effectiveness, and program costs.

SUBJECT AREA(S)

The subject areas of the *Cost-Effectiveness Technique* are cost effectiveness, curriculum evaluation, early childhood, educational accountability, feasibility studies, and reading development.

INTENDED USERS AND BENEFICIARIES

Although tested in the basic skills areas at the elementary level, this technique can be utilized by educational administrators in many curricular and grade levels, including higher education.

GOAL(S) OR PURPOSE(S)

The purpose of this technique is to provide administrators with data on programmatic operations in a format which assures that both effectiveness and cost are considered in programmatic decisionmaking.

PATTERNS OF USE

This technique does not specify a particular pattern of use. It can be used for routine assessment or for indepth analysis of problem situations according to site needs.

ASSESSMENT PROVISIONS

This technique does not introduce values into data analysis. However, the user may select a wide range of subsidiary techniques for program documentation which may or may not bias results. The utilization of this model requires administrative understanding of the assumptions behind subject programs and the biases in documentation (e.g., biases in instruments such as standardized tests) in order to interpret results adequately.

TIME REQUIREMENTS

Great variation in time requirements for the application of this technique will result from variables such as scope of desired cost-effectiveness analysis and the locally available research and evaluation resources. Potential cost savings through the use of this technique well exceed the actual cost of execution.

IMPLEMENTATION PROCEDURES

Where an experienced research/evaluation staff resource exists, implementation of this model should be relatively simple.

MATERIALS AND EQUIPMENT

Where subsidiary evaluation data exist, this model can be applied at minimal expense. Local conditions will determine final costs.

ASSURANCES AND CLAIMS

The results of the NIE study suggest that considerable value exists in this model. As in any research/evaluation model, the final quality or benefit of the model depends upon the quality of data inputs and the appropriateness of the interpretation of the data outputs, factors which cannot be controlled by this model.

RD 140 002

DEVELOPER/AUTHOR:

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Louisville, Ky. 40202

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975 ■

HANDBOOK OF ORGANIZATION DEVELOPMENT IN SCHOOLS

Methods to plan and implement change in a school organization

This 436-page handbook is a guide for school consultants, administrators, team leaders, supervisors, counselors, and psychologists who plan and implement organizational change in their schools. It presents organization development strategies, designs, and techniques indepth, and specifies their practical application. It is a reference tool and a guide to consultative action. The organization development strategy takes intact systems (the organization as a whole) or subsystems (intact work groups) as targets for change, rather than taking the individual as target. The strategy brings each member of the system actively into the assessment, diagnosis, and transformation of the organization.

The core chapters treat critical features of organizational life: Communication processes, goal setting, working with organizational conflict, effective meetings, solving problems, and making decisions. Each of these chapters sets forth theory, skills needed, exercises to develop these skills, and procedures to facilitate that aspect of organizational life. Each chapter presents at least one sample microdesign for organizational training and excerpts from selected readings. The handbook also contains sections on the design of training interventions and both the formative and summative evaluations of organization development interventions.

SUBJECT AREA(S)

The *Handbook of Organization Development in Schools* discusses organizational theory, organization development technology, training program design and evaluation, data gathering, and problem solving.

INTENDED USERS AND BENEFICIARIES

This handbook is primarily designed for use by organizational consultants and specialists (both internal and external to the educational organization), administrators, team leaders, supervisors, counselors, psychologists, and groups of teachers who are involved in planned change in school organization or who want to improve their organization's effectiveness. Secondarily, it can also be useful to professors and students in education, educational administration, and educational psychology, research and development centers in education, and regional laboratories.

The primary beneficiaries are school boards, school district administrators, building administrative staffs, educational planning teams and committees, educational (teaching) teams, the entire staffs of schools, and groups of parents and students that are organized for involvement in their school.

GOAL(S) OR PURPOSE(S)

The goals are to provide both a theory and a methodology for change agents and others who want to improve their organizational effectiveness. Specific goals are (1) To acquaint the readers with important concepts and dimensions of organizational functioning, (2) to teach skills and procedures that will enable school personnel to increase the effectiveness of groups and organizations by improving their functioning on these dimensions, and (3) to provide the school personnel with the tools for evaluating what they are doing.

PATTERNS OF USE

The handbook provides the raw materials from which specific interventions may be designed and implemented in a variety of settings. For maximum effectiveness, the group or organization desiring to receive the benefits of organizational development should be prepared to commit a considerable amount of time to the process. Major structural change within an organization takes at least 1 academic year of organizational development consultation. During this period, the staff should be ready to set aside blocks of time, ranging from a minimum of 2 or 3 days to a maximum of 2 weeks (usually during the summer). They should be prepared to set aside 2- or 3-day periods two or four times during the year. They should expect to supplement this with periodic meetings with consultants during their regular meeting times, evening hours, or during planning periods throughout the year.

In terms of hours, it takes approximately 160 hours of staff time, 40-80 before school opens, and 80 spread over the school year. Smaller time commitments are necessary in situations in which the primary target is less than major structural change in the organization. The described techniques can be used for a group's self-renewal or planning sessions or to deal with specific issues or areas of conflict that are affecting the group at a specific time. For these types of interventions, 1 to 3 days and a followup meeting of 1 or 2 hours may be sufficient.

The subject areas are set forth in a recommended sequence for overall training. However, this is to be regarded as flexible and subject to redesign in response to the needs of each situation.

ASSESSMENT PROVISIONS

There has been no systematic assessment of presumed effects of the handbook itself. Instead, it provides users with numerous "instruments" by which they can assess the efficacy of their own work. If organizational specialists find their work effective when using the handbook and the assessment methods it suggests, this is evidence that it is effective. Unfortunately, there is no systematic list of users who have assessed their work and found it effective. The sales records are evidence enough—the sales have gone up in every 6-month period since publication in 1972.

Effectiveness of the training can be assessed by the participants in the training and by the outcome of their actions. Questionnaires can be administered in a pretest and posttest fashion which assess the group's or organization's norms for communication, influence, collaboration, quality of meetings, satisfaction with job, and other variables. In addition, the effectiveness can be evaluated in terms of the actions carried out by members of the group such as solutions to problems, decisions that are implemented, or structural changes within the organization.

TIME REQUIREMENTS

To facilitate major structural change in the organization, 1 year of OD consultation is essential. A recent analysis of data from one of the projects indicated that 2 years may be essential for school-wide structural changes. During the training period, two to four time periods ranging from 2 or 3 days to 2 weeks are required. In addition, these are supplemented with periodic meetings with the consultant. For other purposes such as a team's self-renewal, planning session, or training in specific skills, a time commitment of 2 or 3 days is advisable.

IMPLEMENTATION PROCEDURES

Effective organizational development has certain prerequisites. First, a competent OD specialist who is sensitive to individual, group, and organizational dynamics is needed. This person may be from inside or outside of the organization. Second, the organization must be flexible enough to temporarily rearrange scheduling and staffing to meet the needs of training and increased planning. There are several other criteria that seem to indicate a "readiness" in an organization for OD training. These criteria are: (1) A degree of openness already existing in the organization, (2) a degree of collaboration already existing in the organization, and (3) a degree of commitment to the goals of the project. To assess these criteria, the implementation process calls for an organizational diagnosis, usually through interviews or questionnaires, prior to the training.

ASSURANCES AND CLAIMS

When adequate consideration has been given to the school's readiness, diagnosis, and preparation, the technology presented in the handbook will not affect users negatively nor perpetuate social biases. In fact, this type of organizational development usually reduces the effects of social prejudice, because it teaches people how to make use of personal resources, make decisions and to take action wherever needed in the organization, instead of relying solely on traditional means which often support social distance and prejudice. Research indicates that the technology is replicable and transportable within the populations studied.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Handbook of Organization Development in Schools	1 per change agent or consultant	12.50		Mayfield Publishing Co

DEVELOPER/AUTHOR:

Program on Strategies of Organizational Change
Center for Educational Policy and Management
University of Oregon
Eugene, Oreg. 97401

Richard A. Schmuck, Philip J. Runkel, Co-Directors
Richard A. Schmuck, Author
Philip J. Runkel, Author
Steven L. Saturen, Author
Ronald T. Mortell, Author
C. Brooklyn Derr, Author

AVAILABILITY

The *Handbook of Organization Development in Schools* is available from:

Mayfield Publishing
285 Hamilton Ave.
Palo Alto, Calif. 94301

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 004

HOW TO INVENTORY ORGANIZATIONAL NEEDS

*A discussion of implementation of school improvement
through setting goals, selecting curriculum, and
implementing and evaluating programs*

How To Inventory Organizational Needs guides school superintendents and other top-level administrators in systematically examining their procedures for bringing about school improvements. School improvement is a complicated process that demands careful examination and planning. The product helps administrators develop not only a common understanding about the position of the school system on school improvement and the specific directions the school system can take to bring it about, but also a basis for determining the resources necessary.

The product focuses on the four school improvement activities of setting goals, selecting curriculum programs, implementing programs, and evaluating programs. An inventory booklet, consisting of a questionnaire, a description of the school improvement process, and an interpretation of the questionnaire, guides users in examining their capability in each area. The product contains worksheets and directions for use.

The inventory can be used in either an individual or group setting, although the latter is preferred. Each member of the planning group individually completes the inventory. Next, a clerk analyzes and summarizes group responses and gives the summaries to the members of the group. Users then come together in a meeting to discuss their answers and the implications of the results for increasing the school's capability for improvement.

SUBJECT AREA(S)

This inventory focuses on planning and administration.

This product emphasizes the self-examination of a school district's capability or procedures for bringing about improvements in curriculum and instruction. Major topics covered are: (1) Setting goals, (2) selecting curriculum programs, (3) implementing programs, and (4) evaluating programs.

INTENDED USERS AND BENEFICIARIES

The product has been designed for use by school superintendents and other district or central office administrators.

GOAL(S) OR PURPOSE(S)

The goal of this product is to help school district superintendents and other top-level administrators examine their decisionmaking processes related to curricular change and improvement. Upon completion of the product, school administrators will have: (1) A realistic assessment of the capabilities of their school district to initiate change, (2) a listing of priorities for improving their capabilities, and (3) an understanding of the resources needed to implement a school improvement program.

PATTERNS OF USE

The product is self-contained and requires no specially trained individual for its use. It can be used by an individual working alone or by a planning group. In a group setting, a committee of no more than seven members is recommended. A group leader, the superintendent, or someone designated by the superintendent organizes and conducts the meeting. Participants prepare for the meeting individually, going through the materials at their own pace. They complete the questionnaire, interpret it, and examine its results. Then, as a group they discuss results, conclusions, implications, and possible courses of action. A clerk may be used to tally and summarize the results and distribute them to participants before the meeting.

ASSESSMENT PROVISIONS

The product contains detailed instructions for use by the district.

TIME REQUIREMENTS

The materials can be completed in approximately 2 hours. The group discussion session may take 3 or 4 hours.

IMPLEMENTATION PROCEDURES

No specially trained individual is required to use the product. The formation of the planning committee and the appointment of a group leader are recommended.

Summary Cost Information

Since the product is still under development, no price has been fixed. Current usage is restricted to field-test sites.

Personnel Required for Product Adoption and Implementation

The product can be used by a single administrator or small administrative team. Consultation and other services are available from the developer at various costs.

ASSURANCES AND CLAIMS

The subject of the product is administration self-assessment of a district's capability/procedures to being about change. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of a content of the product tends to minimize the chance of social bias. Although early product formative evaluation activities have not addressed this issue, later product evaluation will.

The pilot test of the prototype involved school personnel of varied training and experience. Later formative evaluation will involve different school districts and varied personnel to help verify the generalization of results and transportability.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
How To Inventory Organizational Needs	1 set per planning group	Not determined	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The prototype version of this product has been completed and tested. The product is currently being revised and will be available in spring and summer 1975 to field-test sites. Completion of the final product is scheduled for November 1975. It will be distributed by:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 005

PLANNING PROGRAM IMPLEMENTATION: A PROCESS GUIDE

*A handbook outlining major tasks to be considered
when developing program implementation plans*

The *Planning Program Implementation* unit is a 114-page handbook that outlines the major tasks to be considered when developing program implementation plans. Particular attention is given to the details which need attention after a specific program has been chosen. The text emphasizes that the planning process proposed is only one of a variety of ways that the task might be approached. The unit should be used as a guide to thoughtful planning and not as a book of rules. The unit assumes that (a) planning to implement a program is a group process that should involve those who will have responsibility for actual implementation in making the decisions about the programs, (b) these staff members already have the capability for performance of the necessary planning tasks with only the direction provided by general guidelines, and (c) the specific program to be implemented has already been chosen to meet a pressing problem faced by a school.

The unit consists of the following major parts: Section I, an introduction describing the use of the unit, the approach taken, the assumptions upon which the unit is based, and the goals of the unit; section II, the major tasks of planning; section III, suggested procedures for school planners using the unit; and section IV, a more detailed description of each major task outlined in section II.

An appendix sets forth the crucial features of the design of an instructional program in experience-based career education which can be used as a basis for program implementation (if users of the unit have not chosen a particular program to meet an identified need). Two other short appendixes describe the use of task worksheets and provide a glossary of terms used in the unit. Additionally, there is a comprehensive bibliography that includes references to publications and other kinds of training materials that might be useful in staff training.

SUBJECT AREA(S)

Instructional planning and management involves the establishment of instructional program purposes, the design and implementation of programs, and the evaluation of instructional programs. This unit is directed to the second of these three areas. It emphasizes familiarity with and use of particular kinds of processes in a systematic way.

INTENDED USERS AND BENEFICIARIES

The unit is designed for school personnel; i.e., building principals, department heads, district curriculum specialists, and classroom teachers directly concerned with planning for the introduction of a chosen or developed instructional program in classrooms. The unit will prove most useful to staff members drawn from a single school, or group of schools, who are faced with a common instructional problem. It may also be useful to groups composed of staff from different schools or districts, as in university graduate courses or interdistrict workshops, although this is likely to result in a somewhat artificial use of the material.

GOAL(S) OR PURPOSE(S)

The unit is designed to assist users to become more effective planners and managers of their own programs. The unit helps the staff: (1) To prepare implementation plans for previously designed or selected programs in an existing school system, (2) to improve existing implementation plans and practices through group participation and contingency planning, (3) to reduce the failure rate of new programs and lessen the need for expensive, long-term pilot projects, and (4) to prepare plans that contain sufficient information for budgeting.

PATTERNS OF USE

The developers recommend that the unit be used in a self-conducted, group, inservice training program. A group leader is selected from the members to serve as a guide and assistant. Participants are divided into groups of five to eight persons who work through the unit in six sessions of about 3 hours each. There will be considerable variation in the time requirements from one situation to another, depending on the characteristics of the group and the amount of effort that has been devoted to the prior steps of program planning. Individuals who want to train themselves can simply read the material or work through a program with two or three other people, although the group setting is strongly recommended. However the unit is used, the sequence of chapters must be followed.

ASSESSMENT PROVISIONS

Evaluation of each other's individual performances is done by team members. At the end of each session there is a brief discussion evaluating the session in which the individual is urged to participate to the fullest extent.

TIME REQUIREMENTS

An actual implementation plan could be developed using the unit in six sessions of about 3 hours each. There will be considerable variation in the time requirements from one situation to another, depending on the characteristics of the group and the amount of effort that has been devoted to the prior steps of program planning.

IMPLEMENTATION PROCEDURES

The unit does not require any special materials or equipment for its use. Scheduling requirements will be contingent on the needs of the particular group working with the unit. There is no separate set of materials intended for the coordinator or leader.

MATERIALS AND EQUIPMENT

The coordinator and each member of the group should have a copy of the guide. Its price is $5.

ASSURANCES AND CLAIMS

A careful reading of the guide does not reveal any social, ethnic, or sexual stereotyping. The extensive review, prototype testing, and revision processes of the guide indicate that it is easily replicable and transportable.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

AVAILABILITY

A limited number of copies of the guide is available from the developer/author. Further dissemination of the guide is contingent on more field testing.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 006

ATTENDANCE MONITORING SYSTEM (AMS)

A documented computer system to prepare daily and cumulative attendance reports

Attendance Monitoring System (AMS) is a complete computer system with documentation and program listings designed for an IBM 1130 Computing System. When the AMS is implemented in a school it provides daily attendance and late lists that give cumulative days absent and late, monthly and other summary data by homeroom, and an updated attendance data file.

AMS is comprised of a series of interrelated programs which access a common data file. Brief descriptions of the programs are given in the "Patterns of Use" section.

SUBJECT AREA(S)

Student attendance at the school and classroom level is the subject area of this project.

INTENDED USERS AND BENEFICIARIES

School administrators are the users of *Attendance Monitoring System* (AMS). Its use allows them to identify absence problems and to monitor changes that may occur due to corrective efforts. In the development of AMS, the school's students benefited by being heavily involved in the day-to-day operation of the system. The students participated as part of their training in computer usage.

GOAL(S) OR PURPOSE(S)

The goal is to provide schools with a method to measure their attendance problems and monitor progress toward improvement.

PATTERNS OF USE

AMS must be implemented as a complete unit as spelled out by the user's handbook. Briefly, the programs are as follows:

ATINL—initializes all data files and assigns each student a unique identification number based on grade and homeroom to be used in all subsequent computer programs and builds a calendar file. ABPST—reads student cards for each person absent, posts the students absent for that day, and increments the particular month and year-to-date absent totals by one. ATRUN—reads student cards for each person late, posts the students late for that day, and increments the particular month and year-to-date late totals by one; prints a daily attendance report listing all absent and tardy students for the day along with their year-to-date totals for absence and tardiness; and prints percentages of students absent and tardy. MAINT—disk maintenance program which deletes and/or changes any existing student record; also adds new students to the proper file. LSTFL—lists any specified number of records in any specified file (all existing permanent files can be listed). KDPRT—prints or punches attendance data for any month in the school year; also prints or punches students absent or late more than X percent of time. RETR—subroutine which finds the value of an attendance day for a particular student; the routine does not change any value in the attendance record and is used in ABPST and ATRUN. PACK—subroutine which stores appropriate attendance data in the attendance vector and also increments the accumulator values by one; used in ABPST, ATRUN, and MAINT. UNDO—subroutine which resets the value of the attendance vector to zero for the day specified by IDAY and subtracts one from the year-to-date totals. FLICK—subroutine which tests for entering of legitimate file number; used in all the attendance programs.

ASSESSMENT PROVISIONS

AMS has no formal provisions; schools would assess on the basis of their informational needs.

TIME REQUIREMENTS

AMS would require a full year's use to identify long-term absenteeism problems, patterns, and changes.

IMPLEMENTATION PROCEDURES

Special equipment and facilities—IBM 1130 Computing System, either access to or on premises.

Special services—computer programs specialist.

Special user considerations—users would need to be highly motivated to take the time and trouble to implement AMS. Schools with major attendance problems should be so motivated; others would not.

Personnel Required

Computer specialist—may be teacher involved in programing or a computer instructor.

ASSURANCES AND CLAIMS

Assurance of Harmlessness

There is no evidence to suggest that the product would induce physical, psychological, sociological, or other harm.

Assurance of Social Fairness

The product in no way discriminates in sexual or social dimensions.

Assurances of Replicability or Transportability

This cannot be assured. The product does work without direct control of the developer, but the only installation has been in a school where the developer has control. It is felt that a school with computer acess could replicate the AMS by following the user's manual, but information on replications is lacking.

Claims

The AMS is being effectively used in one urban high school to monitor student attendance. It provides a more accurate monitoring than the previous paper system used by the school. No other claim can be made until replication is conducted.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
IBM 1130 Computer or access				
User's manual	1	5.00	Reusable	

DEVELOPER/AUTHOR:

Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

Nancy Karweit, Project Director
Stephanie Freeman, Assistant Director

AVAILABILITY

The AMS User's Manual is available from:
Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 140 007

SYSTEM APPROACH FOR EDUCATION (SAFE)

A competency-based instructional system which provides materials for 36 hours of workshops in simulated problem solving through system analysis and synthesis

System Approach for Education (SAFE) is a competency-based instructional system which provides all materials and procedures for conducting 36 hours of training. Organized into 20 instructional sequences or units, it is conducted as an inservice workshop or preservice course. Continuous active participation is demanded by using simulation situations in which the trainee helps a fictitious teacher solve a problem using the system approach. It applies the system technology planning techniques used widely in industry and the military to the areas of curriculum and instruction.

SUBJECT AREA(S)

The subject area is system technology planning.

INTENDED USERS AND BENEFICIARIES

The intended users are educational administrators and classroom teachers.

GOAL(S) OR PURPOSE(S)

This instructional system is designed to provide teachers with the knowledge, skills, and techniques for analyzing, planning, designing, implementing, and evaluating learner experiences by applying the tools of system analysis and system synthesis. The skills include: Assessing needs, defining goals, stating mission objective, specifying performance requirements, specifying mission constraints, deriving a mission profile, performing function analysis, performing task analysis, performing methods/means analysis, identifying solution alternatives, selecting feasible solution strategy, implementing a solution strategy, evaluating the solution strategy implementation, and utilizing continuous revision to accomplish mission objective.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes a great deal of participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

TIME REQUIREMENTS

The 20 instructional units of this system are organized into a 36-hour workshop.

IMPLEMENTATION PROCEDURES

The activities require a qualified instructor identified by R. E. Corrigan Associates who can conduct the program for approximately 15 participants. Released time may be necessary for school personnel to participate in training sessions.

ASSURANCES AND CLAIMS

During a series of trial workshops, participants were repeatedly asked for feedback concerning this system. In addition to open-ended questionnaires, the "mission" analyses created by participants during training were occasionally collected and reviewed. Occasional individuals stated that the system's content or form was not relevant for them. There were no reports from participants, trainers, or implementors that participants had experienced physical, psychological, or sociological harm. Other reactions were used to revise the system.

Social fairness issues have been considered in creating and revising these materials. While the generic "he" is sometimes used when referring to persons of either sex, the system is generally fair and has been accepted as such by participants.

This system was developed primarily by R. E. Corrigan Associates as a resource for trainers with some expertise in its content and form. While nondevelopers have conducted successful workshops, the developers feel that workshop leaders, wishing to use this system, should be approved by them.

A field test was conducted using two alternate versions of the system with a population of 108 people at 5 workshops. Results of one version were somewhat more positive than the other. Results for the more positive version which is now commercially available are as follows:

1. Eighty-eight percent of the participants found their workshop experience worthwhile and 83 percent would recommend it to a friend.

2. At least 68 percent of the participants responded positively to items about the relevance of the system. Thirty percent reported that, before they could use the process at their worksite, changes would have to be made over which they had no control.

3. Significant cognitive gains were achieved. Mean pretest scores were 5.87 and mean posttest scores were 18.46. It should be noted that a high score of 38 is possible. The developers propose use of the system's materials in an "open book" manner following this training.

4. An expert rated products that were created in the workshops. The mean rating score was 62.86 on a possible

score of 74. Of 14 products rated (products are created by teams of 3 in the workshop), 10 were judged as good, 4 as fair, and none as poor.

5. On a followup questionnaire, 80 percent of the participants reported they had made at least some progress in following through with projects initiated in the workshops.

6. On a preattitudinal and postattitudinal measure, participants moved toward more positive responses on 11 dimensions and more negative on 4. On "anticipating using SAFE in my classroom," there was particular positive movement.

R. E. Corrigan Associates applied the system technology process in developing the system. The process emphasizes a very thorough analytical approach—working toward operationally defined subjectives within stated requirements and constraints. Testing, revision, reanalysis, and replanning were carried out according to this process. The NWREL collaborated in some aspects of this process, making some design recommendations, creating a simulation for use in the training, and conducting a field test of two final versions of the system. Results of the NWREL test are indicated here. Results of other testing may be requested from R. E. Corrigan Associates.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant's manual	1 per participant	35.00 per set; additional consumables 10.00 per set; quantity discounts available		
Coordinator's manual	1 per trainer	Price available from publisher	Reusable	
Audiovisual materials	1 set per trainer	Price available from publisher	Reusable	

For personnel required, see "Implementation Procedures."

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

R. E. Corrigan Associates, Authors

AVAILABILITY

System Approach for Education (SAFE): Classroom Managers Series was copyrighted in 1972, and copyright is held by the Northwest Regional Educational Laboratory. It is currently available from:

R. E. Corrigan Associates
P.O. Box 5089
Anaheim, Calif. 92804

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 008

INDIVIDUALLY GUIDED EDUCATION (IGE)

An alternative form of public schooling which focuses on student development through individualized curriculum and instruction

Individually Guided Education (IGE) is an alternative form of public schooling developed by the Wisconsin Research and Development Center for Cognitive Learning. It is a total system which draws together various educational practices and concerns and focuses upon individual student learning. Every element and phase in the development, refinement, and implementation of the system is designed to create the conditions for effective educational planning, teaching, and learning.

In IGE, the broad range of phenomena ordinarily associated with education has been organized into seven components:

1. Multiunit School (MUS)—The multiunit school is the organizational structure designed to enable educational decisionmaking, open communication, and accountability to occur at appropriate levels of the school system.
2. Instructional Programing Model (IPM)—The IPM provides a framework for teaching children according to their own rates and styles of learning, levels of motivation, and other characteristics, while taking into account the general educational objectives of the school.
3. Curriculum Materials and Instructional Procedures—The Wisconsin Research and Development Center has developed individualized curriculum materials and instructional procedures which are compatible with the IPM.
4. Model for Measurement and Evaluation—The model includes assessment of each child's readiness, progress, and final achievement by the use of criterion-referenced tests and other assessment procedures.
5. Program of Home-School-Community Relations—The students, staff, parents, and citizens who make up the IGE school community must mutually understand each other's resources and expectations in order to create and maintain an optimum learning situation.
6. Facilitative Environments—Relationships established to maintain and strengthen IGE are developed among local, intermediate, and State education agencies and teacher education institutions within each State.
7. Research and Development—If IGE is to remain viable, it must be capable of incorporating change. Continued research and development generate knowledge and programs related to curriculum, instruction, and administration which can be infused into the IGE system.

SUBJECT AREA(S)

As a total system of individualized education, *Individually Guided Education* (IGE) encompasses all subject areas of the curriculum. The Instructional Programing Model (IPM) may be applied to any subject.

INTENDED USERS AND BENEFICIARIES

IGE has been designed for use in elementary schools throughout the Nation; IGE for the secondary level is currently under development. Due to the program's comprehensiveness, the entire staff of a school is involved in implementing IGE. In order to facilitate the implementation of IGE, personnel from teacher education institutions, State education agencies, intermediate education agencies, and local education agencies are trained in IGE concepts and practices and become IGE implementers.

The ultimate beneficiaries are the students who will benefit from teachers' increased abilities to individualize instruction. Students of varying backgrounds, abilities, and characteristics—including special learning handicaps—all benefit from IGE.

GOAL(S) OR PURPOSE(S)

IGE is a comprehensive system of education designed to produce higher education achievements through providing for differences among students—in rate of learning, learning style, and other characteristics.

PATTERNS OF USE

The IGE system has been operationalized in schools in many ways. Performance objectives for schools to follow in implementing the IGE and minimal criteria for being considered an IGE school have been identified. The minimal criteria are: The entire school is organized in the multiunit school organization pattern and the school applies the Instructional Programing Model (IPM) to at least one curricular area. Variations on the school organization and the instructional program are still possible within the broad parameters of the minimal criteria.

A major strength of IGE is its flexibility. There are as many patterns of IGE as there are IGE schools. As long as the basic tenets of individualization contained in IGE are accepted and the minimal criteria are fulfilled, a school is free to adapt the system to meet local needs. Another strength of IGE is that changes are made incrementally, as the school is ready to accept new practices.

ASSESSMENT PROVISIONS

Within IPM, assessment plays a significant role. The level of achievement, learning style, and motivation level of each student is assessed prior to instruction through the use of criterion-referenced tests, observation schedules, and work samples with appropriate-sized groups. Following instruction, students are assessed for attainment of initial objectives. Assessment data are used for program evaluation.

TIME REQUIREMENTS

The time involved in the implementation of IGE varies among schools. Schools are encouraged to implement the multiunit school organization throughout the entire school and to apply the IPM to at least one curricular area by the end of the first year of implementation. As an IGE staff becomes more experienced, it will expand the IPM and related assessment and evaluation procedures to additional curriculum areas, participate in the relationships established within the facilitative environments, and develop a program of home-school-community relations. The total implementation of IGE in a school will probably require from 5 to 7 years.

IMPLEMENTATION PROCEDURES

Basic to the entire implementation of IGE are staff development activities designed to help individuals develop the concepts and skills needed at each phase of implementing IGE. Two major groups need to develop these concepts and skills: People directly involved in implementing IGE in a school, typically local education agency personnel; and people "implementers," people who facilitate or support that implementation, typically personnel from State or intermediate education agencies and/or from teacher education institutions.

Since 1971, when the national implementation of IGE was initiated, the Wisconsin Research and Development Center's activities have been guided by a model which defined efforts, ranging from dissemination of information to the establishment of IGE as an alternative form of schooling. The model was conceptualized in five phases—awareness, commitment, changeover, refinement, and renewal. For each implementation phase, there are staff development activities in which the staff of a prospective IGE school should participate.

Statewide IGE networks have been established to assure a continuing, cooperative relationship between IGE users and sources of assistance. The prototypical State IGE network is comprised of the State education agency, intermediate education agencies (where appropriate), teacher education institutions, and local school districts organized at three levels—local, regional, and statewide. At each level, there is a formal organizational arrangement established whereby IGE personnel can deal with solving problems.

In 1969-70, only 50 elementary schools, all in Wisconsin, were implementing IGE. By 1974-75, approximately 2,500 schools in 38 States had made the complex change to this new educational system.

The rate of IGE implementation over the past 7 years has been enhanced by funds from the U.S. Office of Education (USOE) and the National Institute of Education (NIE), and the commitment to IGE by thousands of local education agencies, State education agencies, and teacher education personnel in 35 States. In addition, two recent events have significantly influenced the diffusion of IGE. One was the funding of the University of Wisconsin/Sears, Roebuck Foundation IGE teacher education project by the Sears, Roebuck Foundation. Funding was for preparing materials which can be used in undergraduate and graduate teacher and administrator education programs. The second major event was the establishment of a national professional association for persons involved in IGE, the Association for Individually Guided Education.

ASSURANCES AND CLAIMS

Assurances

The transportability and feasibility of the IGE system as an alternative form of schooling is indicated by its adoption record. The years 1966 through 1970 saw a gradual increase in the number of schools implementing IGE. Beginning with only 13 units in 1966 in 3 Wisconsin school systems, the total number increased to 50 schools in 1969 following an official endorsement of IGE by the State superintendent of public instruction. By 1971, there were 164 schools in 7 States implementing IGE. In summer 1973, the National Institute of Education approved implementation funds to continue the center's efforts. By the summer of 1974, an additional 100 schools began implementation, bringing the total to over 2,000 schools in 37 States. An independent evaluation of the Wisconsin Research and Development Center's nationwide implementation effort has indicated success in initiating and maintaining the implementation momentum.

All IGE staff development materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. If there is any question on such matters, review of the materials by qualified persons will take place and the materials will be revised to eliminate such shortcomings.

No such complaints regarding bias or harmfulness have been received by the center.

Claims

Since 1967, the Wisconsin Research and Development Center has worked cooperatively with personnel from educational agencies in developing the IGE system. The development of IGE has come about through an iterative process of conducting research to discover more about how children learn; developing improved instructional strategies, processes, and materials for school administrators, teachers, and children; and offering assistance to educators and citizens which will help transfer the outcomes of research and development into practice. After a developmental need for IGE was recognized, the following process was applied to the development of each aspect of the product: Plan, develop, conduct expert review, tryout, revise, and publish. At all stages of development, the substance and form of the product have been evaluated.

The major claims to be made about IGE are in two areas: The careful development of the product and the effectiveness of the multiunit school organization, the instructional program, the school climate, and the implementation process. These claims are supported by research conducted in IGE schools.

The multiunit school organizational pattern provides a stimulating facilitative environment for the individualization of instruction. Staff members participate in small-group shared decisionmaking, sharing their professional expertise in planning, instruction, and evaluation. Leadership from teachers, unit leaders, and principals emerges in this organizational pattern.

The multiunit school organization has been found to be more dynamic than the conventional organization of the elementary school; it is less centralized, less stratified, and more adaptive.

The IPM of IGE describes a systematic approach to individualization. Even though this model is more difficult to implement than the multiunit school organization, indications of its effectiveness have been identified. In the IGE instructional program, there is an increase in the number of opportunities for students to be involved in determining their own goals; a reduction in lockstep grouping of students; and flexibility in the use of independent, small-group, and large-group student grouping patterns. Some IGE schools have found significant student achievement gains. These results have been found in various community types and locations.

The school's organizational and instructional climate is influenced by IGE. Organizational climate in multiunit schools is significantly different than that in non-multiunit schools. Multiunit schools are more change and achievement oriented; their staffs are instructionally satisfied, are more motivated, and perceive greater levels of productivity; and they employ more educationally progressive practices. Students in IGE schools have a more favorable learning climate than students in traditionally organized schools.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
16mm film: "Think Kids"	1 per school	125.00	Reusable	
Audiovisual package (set of 5 filmstrips each accompanied with an audiotape cassette)	1 per school	75.00	Reusable	
Print materials package (guidelines for implementation, prototypic agenda, unit resource file, multiunit school directory, workshop simulation, and current annual report)	1 per school	50.00	Reusable	

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wis.

AVAILABILITY

Information regarding the implementation of IGE is available from:

Wisconsin Research and Development Center for Cognitive Learning
1025 West Johnson St.
Madison, Wis. 53706

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 009

ARIOLE PLANNING KIT

A self-instructional educational planning kit for practicing educators and students of education

The *Ariole Planning Kit* was created in response to administrators and teachers who asked for help in the planning process. The kit was designed, not as a tool for high-salaried planning specialists or consultants, but as a guide to suit the needs of educators at all levels of involvement. The design is flexible enough to be used in any number of situations (e.g., ranging from a classroom in which students are applying techniques of planning and problem solving to a State department in which innovative systems are being evaluated), but structured enough to be of use to pragmatic educators. To accommodate the range of users and situations, the kit is self-instructional, tuned to the skills of practicing educators and students of education.

It is from the emphasis on looking at both the past and the present in attempting to plan for the future that Ariole takes its name from the word "ariolist"—one who predicts the future by using the phenomena in the environment.

Ariole's orientation is teleological; decisions in the planning process must be made in light of desired outcomes.

SUBJECT AREA(S)

Ariole is a self-contained, self-instructional kit incorporating concepts from the fields of planning, problem solving, small-group behavior, data analysis and survey, military history, and philosophy. It also taps successful elements of existing planning methods and attempts to overcome some of their weaknesses.

INTENDED USERS AND BENEFICIARIES

The *Ariole Planning Kit* was created in response to administrators and teachers who asked for help in the planning process. The kit was designed to suit the needs of educators at all levels of involvement. The design is flexible enough to be used in any number of situations, ranging from a classroom in which students are applying techniques of planning and problem solving to a State department in which innovative systems are being evaluated, but are structured enough to be of use to pragmatic educators. To accommodate the range of users and situations, the kit is self-instructional, tuned to the skills of practicing educators and students of education.

GOAL(S) OR PURPOSE(S)

The purpose of this kit is to provide a flexible, self-instructional program tuned to the skills of practicing educators and students of education who desire to embark on a planning activity.

PATTERNS OF USE

To use the kit, the planner begins with the guide, which offers specific planning guidelines for and keys to introduce the user to the other three parts of the kit. Each of the guide's 18 sequential decision points generally share the same format: A description, discussions, and a list of alternatives and considerations. Each decision point generally takes a maximum of 1 hour to complete. The kit is constructed so that some decision points may be skipped if a previous decision makes them irrelevant. Decision point 10, "Categorizing Responses," exemplifies the format.

ASSESSMENT PROVISIONS

There are no prior assessment provisions. Evaluation of the kit is based on the final plan developed by the user and whether it is accomplished.

TIME REQUIREMENTS

There are no set time requirements; users work at their own pace.

IMPLEMENTATION PROCEDURES

There are no special equipment requirements beyond the basic *Ariole Planning Kit*.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Guide	1 per planner	Not available	Reusable	
Manual	1 per planner	Not available	Reusable	
Planner's notebook	1 per planner	Not available	Reusable	
Wall chart	1 per planning group	Not available	Reusable	

DEVELOPER/AUTHOR:

Center for Educational Policy and Management
CASEA/Research and Development Division
University of Oregon
1472 Kincaid St.
Eugene, Oreg. 97401
Francis C. Thiemann, Program Director

AVAILABILITY:

The *Ariole Planning Kit* is not currently available to the general public. For further information, contact:

Center for Educational Policy and Management
CASEA/Research and Development Division
University of Oregon
1472 Kincaid St.
Eugene, Oreg. 97401

INFORMATION CURRENT AS OF JUNE 1975 ■

RD 140 010

DATA MANAGEMENT AND DECISION-MAKING

Instructional materials designed to acquaint educational administrators with the applications of operations research to educational administration

Data Management and Decisionmaking (DM/DM) is a set of instructional materials designed to teach practicing and potential educational administrators about the uses of operations research in educational administration. It consists of five units: (1) "Operations Research in Education," (2) "PERT/CPM: A Planning and Analysis Tool," (3) "Linear Programing," (4) "Queueing Theory," and (5) "Computer Simulation."

The first of these units is designed as an introduction to the other four and is intended to be an "organizer" for the other units. Each of the units introduces a specific operations research technique and provides instruction on the basic terminology and skills involved in the technique. Each unit gives the user practice in the procedures of the technique and in using the computerized versions of the technique. In each case, instruction is provided in using the computer terminal, inputting the data, and interpreting the output of the computer program. Throughout each unit, examples from the field of education are used to illustrate points and procedures and the final portion of each unit discusses how the technique can be used in solving educational administration problems. The units are constructed so that the user is made aware of the unit instructional objectives before starting work on the unit, and exercises are interspersed throughout the tests to give the user practice in using the covered concepts.

As the titles of the above-listed units indicate, the materials are concerned with four specific operations research techniques beginning with PERT, which is a technique for planning the allocation of resources in large projects. The second is linear programing, which is a mathematical technique for optimizing such quantities as cost under conditions of constraints. Queueing theory, the third technique, is a mathematical method for analyzing situations in which a queue or line of customers must wait for some service. The final technique, computer simulation, is a much more general problem-solving method. It is the process of using the computer to investigate situations in which it is too dangerous, expensive, or would take too long to experiment with the actual situations. The two examples that are used as illustrations in the text are bus routing and enrollment prediction.

SUBJECT AREA(S)

The subject area is educational administration management.

INTENDED USERS AND BENEFICIARIES

The intended users of the program are educational administration students and practicing educational administrators.

GOAL(S) OR PURPOSE(S)

The overall goals of the *Data Management and Decisionmaking* materials are to instill an awareness of and some familiarity with specific operations-research techniques in educational administrators and to create a positive attitude toward using operations research in educational administration.

PATTERNS OF USE

Data Management and Decisionmaking can be used in college level courses in educational administration, inservice or special training workshops, and independent study in operations research. Each of these three uses of the DM/DM materials requires different conditions.

When the DM/DM materials are used in a college course in educational administration, they are intended to serve as a supplement to the usual course content. Consequently, it is possible to use anything from a single unit to all of the units, depending upon how much time the instructor wishes to devote to operations research. Due to the structure of the units, it is not necessary for the instructor to lecture on the techniques to be covered, but the learning process will be facilitated by having the instructor available to answer questions and conduct group discussions concerning the topics under consideration. Optimal use of these materials requires having access to a time-sharing computer and several computer terminals. It is also helpful for students to work on the materials in small groups because it is conducive to problem solving. In addition, a minimum of two class sessions should be devoted to each unit, since approximately 6-8 hours are necessary to go through each of the units. With the additional participation of the instructor, it is anticipated that the results of instruction should be even more positive.

When the DM/DM materials are used in inservice training or a workshop, a large variety of instructional configurations is possible. The three most probable configurations will be discussed here. The first is a 1-day inservice training session for practicing administrators. Here it will probably be most appropriate to concentrate on only one technique, since about 6-8 hours will be required. Again, computer access must be arranged for and terminals must be available. It is also assumed, in this situation, that the presence and participation of the instructor is particularly important. The most successful use of the materials in this situation would probably be a combination of lecture, discussion, group work, and self-study. These same cautions and conditions will also be true of 1- or 2-day workshops. The second alternative is the long-duration workshop in which the entire set of DM/DM materials is used. This is a period of concentrated study in which each of the four techniques would occupy 1 day of study. Again, leadership is important to the success of the workshop, even though the materials are designed to be largely self-instructional.

The third method of product use is in the self-study mode. The materials were designed so that individuals interested in using operations research in education could learn the use of some techniques by working through the booklets, however, in this mode additional assumptions are made about the user. In using some of the units, the mathematics is moderately complex. If an individual is to be entirely independent, a good background in mathematics is necessary. Also, in order to effectively use the computer as a learning tool, it is necessary to be somewhat familiar with the operation of a computer terminal and to have some knowledge of how to correct mistakes. In addition, in this mode it is especially important to work through the exercises, since the user has no other source of feedback.

ASSESSMENT PROVISIONS

There are "check your understanding" questions at the end of each unit.

TIME REQUIREMENTS

Approximately 8 hours per unit or 30 hours total are used as part of a typical university course.

IMPLEMENTATION PROCEDURES

A computer with a BASIC compiler and terminal is needed to implement the product.

ASSURANCES AND CLAIMS

Assurances

No danger or hazard was reported during the testing of this course.

Attempts were made to eliminate any bias toward sex, race, religion, age, or socioeconomic stereotypes.

In the minimum mode of instruction, only the book itself is needed for the course. Adaptation of other described modes would require computer access and, therefore, might have more limited replicability.

Claims

The DM/DM materials were tested in the field at three different sites, and revisions were made based on feedback from the users.

RD 140 010

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Materials	1 set per workshop	180.00	Consumable	
Instructor:				
Fee		800.00		
Travel		60.00		
Class setup:				
Telephone	1 per workshop	120.00		
Miscellaneous	1 per workshop	50.00		
Computer terminals	1 per 4 students	20.00	Reusable	

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

AVAILABILITY

The DM/DM materials are not currently available. A publisher has not yet been selected.

INFORMATION CURRENT AS OF MARCH 1975 ■

1070

RD 140 011

RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY (REACT) COMPUTERS IN EDUCATION: A SURVEY COURSE I: COMPUTERS IN EDUCATION: A SURVEY

A training course to introduce school personnel to the potential applications of computer technology to their field

The REACT computer training courses were developed in recognition of the fact that a degree of "computer literacy" is valuable for all educators today. School administrators face decisions about the most appropriate use of the computer for data management in their school or school district. They need to know what is involved in implementing a data processing system.

Teachers are, or are about to be, faced with decisions concerning the place of the computer in the curriculum, the purposes for which it will be used, how much it will be used, and other related questions. The REACT courses help prepare teachers to make such decisions and to use the computer efficiently in their own teaching.

The main objective of the REACT program is to equip the educator to make competent decisions about the use of computers in administration or in a particular subject area. This objective is accomplished by providing a background in basic computer concepts, some experience in programing a computer, an appreciation of the social impact of the computer, and hands-on experience with administrative and instructional applications.

SUBJECT AREA(S)

Educational computer technology.

INTENDED USERS AND BENEFICIARIES

Educators who are interested in using computers in administration, or in subject areas.

GOAL(S) OR PURPOSE(S)

Goal of this course is to provide administrators, teachers, curriculum specialists, and undergraduage and graduate education majors with an introduction to computers. Educational uses of computers are presented in the broader context of the study of elementary computer concepts and the role of the computer.

PATTERNS OF USE

The 10 books comprising the course can be purchased and used individually, or they can be ordered in course sets. They can be used as texts in a university education curriculum, in an inservice class for educators, or in an individual study program.

Each book contains a list of objectives to help direct the reader. Also, in many of the books, the introduction lists special equipment or supplementary materials that are needed. Success in the course depends upon use of the required equipment and practice in solving the problems that are presented.

Many of the books involve some work on a Teletype terminal. In book 4 of course I, the student learns to use a teletype.

After reading each book, students evaluate their comprehension by taking the self-quiz. If students score less than 80 percent, they are asked to review, paying particular attention to the points they missed. The suggested bibliography guides students to helpful supplementary resources.

ASSESSMENT PROVISIONS

There is a self-quiz with each unit. The 10th book in the series contains unit tests for the total course.

TIME-REQUIREMENTS

Approximately 30 hours.

IMPLEMENTATION PROCEDURES

Special equipment:
Computer with BASIC compiler.
Computer terminal/ASR 33 teletypewriter or equivalent.
Special services:
Computer expert available to answer questions.
Organizational requirement:
More success has been realized when these materials have been used as part of a formal course, rather than in a self-instructional mode.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

No known harmful effects were noted by the observers of these materials during field-test situations, nor have any been reported since the product has been in the field.

Assurances of Social Fairness

The materials have not been analyzed for racism or sexism.

Assurances of Replicability or Transportability

The materials are designed to be used with a computer and computer terminals but they are also being used without computer access. Therefore, they can and are being used where computer systems are available, as well as in regular classroom situations.

Claims of Careful Product Development

These materials went through field testing. User feedback was used as a basis for revising materials.

Claims of Effectiveness

The data show that 71 percent of the students achieved an average score of 70 percent or better for all manuals in self-instructional mode. Data for the group presentation class show that 72 percent of the students achieved the same success rate. Apparently, the mode of presentation does not contribute significantly to success and the materials adapt well to either mode.

Wherever tests were conducted, it was found that the greatest need for assistance always arose during set-up: In orienting the coordinator, supplying materials and tests, and establishing procedures. After set-up, any problems that arose could be handled by telephone.

It was established in interviews with the local coordinators that the initial set-up problems could be taken care of, for the most part, by an adequate "set-up manual" or user's guide, plus an initial visit from a developer. This new manual is an outcome of these needs.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Set of 10 books	1 set per student	20.50 per set	Consumable yearly	
Teletypewriter	1 per 6 students	125.00 rental per month	N/A	Implementer
Computer with a BASIC compiler	1	Depends on system. About 2 hours terminal connect time per student	N/A	Implementer

Note: It is desirable to have a trained computer specialist available to consult on questions from time to time.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. 2d Ave.
Portland, Oreg. 97204

AVAILABILITY

Copyright for the REACT programs is 1971 by Northwest Regional Educational Laboratory. It is being published and distributed by:

Tecnica Education Corporation
1864 South State St.
Salt Lake City, Utah 84115

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 012

RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY FOR TEACHERS (REACT) COURSE II: TEACHERS: COMPUTER-ORIENTED CURRICULUM

A training course to provide teachers with specific examples of methods of integrating computer technology in business, mathematics, and science curriculums

Course II: Teachers: Computer-Oriented Curriculum is composed of application units in various subject areas. These units include a description of the computer program, rationale for the unit, ways of integrating the unit with the ongoing curriculum, performance objectives, and suggestions for a sequence of class activities during use of the unit.

SUBJECT AREA(S)

The subject area is computer technology as it is related to business education, English, mathematics, science, and social studies.

INTENDED USERS AND BENEFICIARIES

Elementary, secondary, and junior college teachers are the intended users.

GOAL(S) OR PURPOSE(S)

The units of the REACT course were designed to give teachers several examples of units that they might use in their courses and to stimulate thinking in the direction of other possible ways in which the computer could be used to enrich the curriculum.

PATTERNS OF USE

The eight books comprising the curriculum can be purchased and used individually, or they can be ordered in course sets. They can be used as texts in university education curriculum, in an inservice class for teachers, or in an individual study program.

Each book contains a list of objectives to help guide the student through the reading. Where appropriate, the introduction lists special equipment or supplementary materials that are needed.

ASSESSMENT PROVISIONS

There is a self-quiz with each unit and the seventh and eighth books contain tests and answers.

TIME REQUIREMENTS

Approximately 30 hours of instruction are required.

IMPLEMENTATION PROCEDURES

The following are needed to implement this program:

1. Special equipment—Computer with BASIC compiler and computer terminal/ASR 33 Teletype or equivalent.
2. Special services—Computer specialist available to answer questions.
3. Organizational requirements—It should be noted that more success was realized when these materials were used as part of a formal course or with individual study under a tutor than with use through total independent study. (See "Patterns of Use.")

ASSURANCES AND CLAIMS

Assurances

No known harmful effects were noted by the observers during field test situations, nor have any been reported since the product has been in the field.

The materials have not been analyzed for racism or sexism.

The materials are designed to be used with a computer and computer terminals, but they are also being used without computer access. Therefore, they can be used and are being used where computer systems are available, as well as in regular classroom situations.

Claims

These materials went through field testing, and user feedback was used as a basis for revising materials.

The data show that 71 percent of the students achieved an average score of 70 percent or better for all manuals in self-instructional mode. Data for the group presentation class show that 72 percent of the students achieved the same success rate. Apparently, the mode of presentation does not contribute significantly to success and the materials adapt well to either mode.

Whenever tests were conducted, it was found that the greatest need for assistance always arose during setup—in orienting the coordinator, supplying materials and tests, and establishing procedures. After setup, any problems that arose could be handled by telephone.

It was established in interviews with the local coordinators that the initial setup problems could be taken care of, for the most part, by an adequate setup manual or user's guide, plus an initial visit from a developer. This new manual was written to meet this need.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Set of 8 books	1 set per student	18.60 per set	Consumable yearly	
Teletypewriter	1 for each 6 students	125.00 rental per month	Not available	Implementer
Computer with a BASIC compiler	1	Depends on system; will use about 2 hours of connect time per student	Not available	Implementer

Note: A trained computer expert is helpful, if available.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

AVAILABILITY

Computer-Oriented Curriculum was copyrighted in 1971 by Northwest Regional Educational Laboratory. It is being published and distributed by:

Tecnica Education Corp.
1864 South State St.
Salt Lake City, Utah 84115

INFORMATION CURRENT AS OF MARCH 1975 ■

RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY FOR ADMINISTRATORS (REACT) COURSE III: COMPUTER APPLICATIONS FOR ADMINISTRATORS

A training course to allow administrators to examine the benefits and limitations of a computerized data management system

Course III: Computer Applications for Administrators permits administrators to examine the concept of data management systems by utilizing a demonstration system constructed for a model school. The units are: Introduction, School Administration With Computers; Attendance, Grades, Student Records; Staff File Reports and Inquiry; Financial Accounting; Facilities and Materials Accounting; Salary Negotiations; Planning, Programing, Budgeting; MIDAS Reference Manual; MIDAS Listings; and Administrative Applications: Unit Tests.

SUBJECT AREA(S)

The subject area of this product is computer technology in educational administration.

INTENDED USERS AND BENEFICIARIES

Administrators of educational institutions are the intended users.

GOAL(S) OR PURPOSE(S)

The units of the REACT course were designed to give educational administrators an understanding of how the computer is being used in assisting in educational decisionmaking and to give insights into how computer applications work to stimulate new and better ways of using computers in educational institutions.

PATTERNS OF USE

The 10 books comprising the course can be purchased and used individually, or they can be ordered in course sets. They can be used as texts in a university education curriculum, in an inservice class for administrators, or in an individual study program.

Each book contains a list of objectives to help guide the student through the readings. When appropriate, the introduction lists special equipment or supplementary materials that are needed.

ASSESSMENT PROVISIONS

There is a self-quiz with each unit and the 10th book contains tests and answers.

TIME REQUIREMENTS

Approximately 30 hours of instruction are required.

IMPLEMENTATION PROCEDURES

The following are needed to implement the program:

1. Special Equipment—Computer with BASIC compiler and computer terminal/ASR 33 Teletype or equivalent.
2. Special Services—Computer specialist available to answer questions.
3. Organizational Requirements—It should be noted that more success was realized when these materials have been used as part of a formal course or with individual study under a tutor than when used through total independent study. (See "Patterns of Use.")

ASSURANCES AND CLAIMS

Assurances

No known harmful effects were noted by the observers during field test situations, nor have any been reported since the product has been in the field.

The materials have not been analyzed for racism or sexism.

The materials are designed to be used with a computer and computer terminals, but they are also being used without computer access. Therefore, they can be used and are being used where computer systems are available as well as in regular classroom situations.

Claims

These materials went through field testing. User feedback was used as a basis for revising materials.

The data show that 71 percent of the students achieved an average score of 70 percent or better for all manuals in self-instructional mode. Data for the group presentation class show that 72 percent of the students achieved the same success rate. Apparently, the mode of presentation does not contribute significantly to success and the materials adapt well to either mode.

Whenever tests were conducted, it was found that the greatest need for assistance always arose during setup—in orienting the coordinator, supplying materials and tests, and establishing procedures. After setup, any problems that arose could be handled by telephone.

It was established in interviews with the local coordinators that the initial setup problems could be taken care of, for the most part, by an adequate setup manual or user's guide, plus an initial visit from a developer. This new manual was written to meet this need.

RD 140 013

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Set of 10 books	1 set per student	18.55 per set	Consumable yearly	
Teletypewriter	1 for each 6 students	125.00 rental per month	Not available	Implementer
Computer with a BASIC compiler	1	Depends on system; will use about 2 hours of connect time per student	Not available	Implementer

Note: A trained computer expert is helpful, if available.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

AVAILABILITY

Computer Applications for Administrators was copyrighted in 1971 by Northwest Regional Educational Laboratory. It is being published and distributed by:

Tecnica Education Corp.
1864 South State St.
Salt Lake City, Utah 84115

INFORMATION CURRENT AS OF MARCH 1975 ■

DESIGNING INSTRUCTIONAL PROGRAMS

A training package for team activities in workshops, college courses, and school settings

Designing Instructional Programs is a training package designed for team activities in workshops, college courses, and school settings. It consists of an educational game, a coordinator's handbook, and a two-part participant's handbook designed to assist school staff in making defensible choices about the form and content of instructional programs. The material is presented in five modules:

1. Chalk talk—An educational game played by three teams of three or four people Each team goes through the step-by-step process of designing an instructional program for a subject area and grade level chosen by the team. There is a scoring system for the game so that a team can "win," but the real purpose of the game is to introduce the participants to the total design process and stimulate interest in the subsequent modules.
2. Analyzing basic assumptions—Participants and teams identify the assumptions that underlie their instructional planning, justify their assumptions to members of other teams, and reach a team consensus on the assumptions to be used in planning an instructional program.
3. Matching programs with goals—Planning teams analyze and organize the goals and objectives to be met by an instructional program and make judgments about the program characteristics appropriate for meeting these goals and objectives.
4. Assessing resources and constraints—Participants work through a set of simulated instructional planning problems focused on the task of estimating program costs, considering possible cost trade-offs, and considering staff and community resources and constraints that could affect the success or failure of a program.
5. Selecting curriculums—Participants are prepared for and practice the use of an instructional planning tool for analyzing and comparing different curriculums that might be adopted or adapted to meet program objectives. The "Curriculum Analyzer" in this module can be used for assessing the strengths and weaknesses of actual curriculums.

SUBJECT AREA(S)

The general subject area of this unit is instructional planning—that area of educational administration concerned with providing educational opportunities for children. This area may be further defined as involving the establishment of instructional program purposes, the design and implementation of programs, and the evaluation of instructional programs. The materials in this unit are directed to the second of these three functions.

INTENDED USERS AND BENEFICIARIES

The unit is designed for school personnel directly concerned with the design or selection of school curriculums to be implemented in classrooms—building principals, department heads, district curriculum specialists, and teachers serving on curriculum committees. The intended user group is best defined by function rather than particular role or title; the group could include nonadministrative staff, board of education members, and parents and students.

GOAL(S) OR PURPOSE(S)

The goal of the unit is to assist in the preparation of school staff in making defensible choices about the form and content of instructional programs. The general objectives of the unit are to provide experiences in the process of analyzing basic assumptions about students and learning with the necessary tools, the matching of program characteristics with intended learning outcomes, a consideration of the resources available for and the constraints imposed on program as designed, and the analysis of existing programs that might be useful.

PATTERNS OF USE

The modules in the unit were designed for a set cycle, but a different sequence or starting point may be selected depending on the type and intent of participants. For example, a professor of education offering the training in the context of a graduate course in educational administration may want to use only part of the materials.

The unit has been used successfully in 3-hour sessions meeting once or twice a week for an extended period, in full-day workshops for 2 or 3 consecutive days, and in less structured periods where some of the materials were homework. The schedule may be based on the suggested times for each activity presented in the coordinator's handbook; in some cases individual reading and work can be completed at home to save class time for group activities.

ASSESSMENT PROVISIONS

The unit is designed primarily for decisionmakers who see a need for upgrading the quality of instruction as well as for those who "manage" others in performing tasks in instructional design. It should be stressed, however, that knowledge or proficient instructional planning amd management is not required for participation.

Self-tests with suggested responses are provided throughout the program for users to evaluate their progress and general knowledge. Evaluation of individual performance is done by other team members. At the end of each activity contained in the modules, teams may discuss problems or questions that have arisen during each session.

TIME REQUIREMENTS

If the unit is used as the developers intended, it should take about 15 hours to complete; Five 3-hour sessions with each session devoted to one module. This time requirement is highly flexible, and the scheduling of the unit depends on the nature of the group.

IMPLEMENTATION PROCEDURES

The unit does not require any special materials or equipment for its use. Scheduling requirements will be contingent on the needs of the particular group working with the unit.

ASSURANCES AND CLAIMS

Components of the materials were initially developed and tested separately. Modules 1 and 2 were tested on at least three separate occasions as prototypes and have since been tested five times with various types of school user groups. Modules 3, 4, and 5 have been tested five times in workshops and local school districts. The total number of test participants was approximately 200. The materials have also been reviewed independently by experts in currikulum and instruction. The wide testing and reviewing indicate that the unit is easily replicable and transportable. A careful examination of the materials does not reveal any social, ethnic, or sexual stereotyping or bias. None of the external evaluation reports suggests that the product is in any way harmful.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Full set of materials including game, coordinator's and participants' handbooks	1 set per 10 participants	35.00 per set; 11.75 for each additional pair of manuals	Game and coordinator's handbook reusable; parts of other handbook consumed during unit work	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and
Development
1855 Folsom St.
San Francisco, Calif. 94103

AVAILABILITY

Designing Instructional Programs was copyrighted in 1975 by the Far West Laboratory for Educational Research and Development with all rights reserved. The unit is currently available from the developer/author:

Far West Laboratory for Educational Research and
Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 015

DIAGNOSTIC SURVEY FOR LEADERSHIP IMPROVEMENT (DSLI)

A 52-item survey for assessing discrepancies between staff and student needs and organizational demands

The *Diagnostic Survey for Leadership Improvement* (DSLI) is based upon the theoretical model developed by Rensis Likert, who has been conducting research in industry and schools about leadership (management) systems which contribute to organizational effectiveness. Likert claims that organizations too often secure measurements dealing only with end-result variables, such as profit in industry and student achievement in schools. There are two other sets of variables, "causal" and "intervening," which directly affect end-result variables and, consequently, should also be examined. All three sets of organizational variables are defined by Likert in his book, *The Human Organization: Its Management and Value* (1967).

"Causal variables include the structure of the organization and management's policies, decisions, business and leadership strategies, skills, and behavior.

"The intervening variables reflect the internal state and health of the organization, e.g., the loyalties, attitudes, motivation, performance goals, and perceptions of all members and their collective capacity for effective interaction, communication, and decisionmaking."

"The end-result variables reflect the achievements of the organization, such as its productivity, costs, scrap loss, and earnings" (Likert, 1967, p. 29).

The 52 items in the DSLI are designed to diagnose the discrepancies and the intensity of these discrepancies as relates to the "is's" and "should be's" of the items in defined organizational processes. The basic assumption undergirding the diagnosis is one stated by Chris Argyris in his book, *Integrating the Individual and the Organization* (1964): "The organization will tend to develop unintended consequences when there is a lack of congruency between individual needs and organizational demands" (Argyris, 1964, p. 67).

By determining where there are incongruencies between organizational demands (causal variables) and individual needs (intervening variables), the school organization can develop intervention strategies which when implemented will result in a more efficient operation concerning the way people work together in schools. These incongruencies are diagnosed for the students, teachers, and administrators at the teaching, department, school, and overall system levels.

SUBJECT AREA(S)

The DSLI is a diagnostic survey which has been developed to diagnose problems in the "causal" and "intervening" variables. The items in the survey have been developed to diagnose breakdowns in the following organizational processes operating at various levels (from the classroom to the central office) in the school operation:

1. Communication—The perceived and desired adequacy of the communication process upward, downward, and laterally. (Sample Item-08. Your leaders discuss with you or your peers ways to improve things.)
2. Control—The perceived and desired use of organizational reward and penalty mechanisms to accomplish school tasks. (Sample Item-05. Your leaders use what they know about "how you are doing" to help you improve.)
3. Decisionmaking—The perceived and desired basic structure and method of decisionmaking. (Sample Item-10. You or your peers take part in making decisions which affect you.)
4. Interaction-influence—The perceived and desired practice of individual and group interaction to influence the accomplishment of school tasks. (Sample Item-01. Your leaders have faith and trust in you.)

INTENDED USERS AND BENEFICIARIES

The school is the basic unit of analysis. In any school system, an individual school, any number of schools, or all the schools in the entire system are able to use the DSLI. Each item in the survey has been determined to be on a 4th-grade reading level. This determination of reading level is based on both the Dale/Chall and the SRA formulas. In the national study the DSLI has been used with random samples of students in the 7th, 9th, and 11th grades. It has been used with all professional staff who attend school faculty meetings in elementary, middle or junior high, and senior high participating schools.

Students respond to the leadership patterns of teachers in one of eight specified subject areas (language arts, social studies, science, mathematics, health/physical education/safety, home/industrial arts, vocational education, and fine arts). Students also respond to the leadership patterns of the principal's staff and/or the principal.

Teachers respond to the leadership patterns of their department chairperson. Teachers also respond to the leadership patterns of the principal's staff and/or the principal.

The other certified staff, e.g., assistant principal, counselor, and librarian, respond to the leadership patterns of the principal's staff and/or the principal. They also respond to the leadership patterns of the person directly above the principal in the central office.

The principal responds to the leadership pattern of the persons in the school system to whom the principal is directly responsible.

Other potential users are elementary students (5th and 6th grades) responding to the leadership patterns of their self-contained or departmentalized classroom teachers. Slight modifications in the instructions for administration can be made to accommodate the survey for use by upper elementary students.

The ultimate beneficiaries are all members of the school organization. Research in industry and some in schools have indicated that, when people are treated like cogs in a machine, absenteeism, vandalism, grievances, and union activities are also present to a larger degree. By adapting the causal variables to the needs of people in schools, the school organization has greater potential for accomplishing its tasks at higher efficiency levels. It has not been determined whether student achievement (effectiveness) will be influenced by this approach.

GOAL(S) OR PURPOSE(S)

The purposes of this project are: (1) To diagnose the problems which students, teachers, and administrators are having in communication, control, decisionmaking, interaction-influence, and confidence and trust in leadership school organizational processes at the teaching, department, school, and system levels; (2) to determine whether the problems are more or less serious with minority racial groups in the school and with subgroups at the various levels; (3) to provide the 10 most critical items (measured by intensity of difference between the "is" and "should be" responses) of each subgroup at the level surveyed; (4) to give "directions for improvement" (derived from the theoretical framework used) for each "critical item" identified; and (5) to stimulate the development of intervention strategies (based upon the "directions for improvement") by encouraging leaders at each level to develop "action plans" to reduce the intensity of the 10 items identified.

PATTERNS OF USE

Detailed programed instructions, "Instructions for Administering the *Diagnostic Survey for Leadership Improvement* (DSLI)," are able to be used by personnel from within the school being surveyed. It is recommended that the survey be administered by someone in the school who is not one of the leaders being surveyed. Most respondents who have taken the survey have been able to complete it within the recommended time (40 minutes). This time includes passing out the materials, giving the instructions, and responding to all the items.

The information provided can be used as a needs assessment upon which staff development can be based. It also can be used as a basis for teacher accountability as far as teaching methods and classroom activities are concerned and for leadership accountability as far as improving leadership practices is concerned.

Without singling out individual teachers, group decisions can be made by individual teaching departments which should provide peer pressure to improve the interaction patterns with students in classrooms.

Even though superordinates often see problems subordinates are having with their leadership patterns, it is difficult to get improvement made because subordinates can, and often do, perceive situations differently than their superordinates. However, when data are used as a basis for expecting improvement, the subordinate has a difficult time escaping the responsibility for taking action.

ASSESSMENT PROVISIONS

All staff assigned to a school who usually attend professional faculty meetings are the ones who take the survey. It is recommended that all students in a middle grade level (grade 7 for a school with grades 6, 7, and 8; grades 10 and 11 for a school with grades 9, 10, 11, and 12) be used as the student population. Random-sampling procedures for selection of students at a grade level may be used. If a random-selection procedure is used, it is recommended that a minimum of 25 percent of the total students in the entire school be used for each teaching area to be surveyed. Students can be surveyed in each of the eight identified subject areas, or the student survey can be restricted to the four major subject areas (language arts, social studies, science, and mathematics).

The survey should be administered near the end of the second-quarter (or first-semester) operation in any particular year. This permits time in that school year to receive the results and to make action plans for implementing improvement interventions. If a resurvey is desired, plans should be made to readminister the survey approximately 1 year later to all of the staff attending faculty meetings and to students in the same subject areas and at the same grade level as were previously surveyed.

TIME REQUIREMENTS

As mentioned previously, it takes about 40 minutes to administer the survey. The DSLI can be machine scored and reports generated and returned to the school within 1 month after the survey has been completed. A school that gives the survey before Christmas can have the reports back by the end of Janaury. Within the next 2 months (by the end of March), data can be analyzed and action plans developed at each level. Three months after the survey, implementation of action plans can begin.

IMPLEMENTATION PROCEDURES

Action plans, based upon the critical items report at each level (teaching area, department, school, and central office), can be made by the leaders and their staff at each particular level. Staff development inservice activities also can be developed based upon the identified needs generated by the critical items reports.

ASSURANCES AND CLAIMS

Assurances

As of March 1975, the DSLI has been used with a national stratified, randomly selected population consisting of 23 school systems—1 randomly selected elementary school, 2 randomly selected middle schools, and 2 randomly selected senior schools in each of the 23 school systems. The total population involved in the presurvey was approximately as follows: 10,000 students reporting on teachers, 10,000 students reporting on the principal's staff and/or the principal, 6,000 teachers reporting on department heads, 6,000 teachers reporting on the principal's staff and/or the principal, 400 department heads reporting on the principal's staff and/or the principal, 475 other certified (excluding the principals) reporting on the principal's staff and/or the principal, and 600 other certified (including the principals) reporting on the central office leadership.

The same population is being given a postsurvey (February and March 1975) using a slightly modified version of the original survey form. The modifications in the survey are based upon data analyses resulting from the presurvey results.

The project director and staff members have made two onsite visitations to each participating system. The first onsite visits were made to explain the project objectives and to make arrangements for survey administrations. The second onsite visits were made to deliver and to explain the computer reports and how to use them. On the basis of the second visits, refinements were made in the reports to be generated by the postsurveys.

Claims

Until the completion of the project in June 1976, no claims can be made. Comparisons of presurvey and postsurvey results and data analyses will be performed and described in the final report.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
DSLI 8-page machine-scored survey booklet	1 survey booklet for each staff and student respondent for each administration	1.50 per survey booklet (price includes scoring and computer reports)*	Distribution arrangements not yet made	

*Price has not been determined, but price quoted is based upon similar service by ETS for IGI (Institutional Goals Inventory).

DEVELOPER/AUTHOR:

Bureau of Field Studies
College of Education
University of Georgia
Athens, Ga. 30602

David J. Mullen, Author and Project Director

AVAILABILITY

Final plans for publishing and marketing have not been completed. Attempts will be made to have the DSLI available for general use by fall 1976.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 016

ERNSTSPIEL TASK GROUP COMMUNICATIONS KIT

*An eight-segment kit for developing individual skills
in communications and interpersonal relationships*

The Ernstspiel kit contains eight packets—each focusing on a communication concept or skill. The first six packets deal with the single concepts of one-way and two-way communication, tacit communication, nonverbal communication, bypass communication, overload communication, and written communication. The last two in the series require the participants to incorporate the knowledge and skills learned in the first packages to solve more complex communication problems and interpersonal relationships within a simple organizational setting. The last two packets are group norms and individual versus group.

SUBJECT AREA(S)

Communication skills and task group experiences

Eight common experience units comprise the *Ernstspiel Task Group Communications Kit.*

One-way and two-way communication package, which involves each person as a participant, not as an observer. It attempts to delineate clearly the differences between these two types and to assist participants in identifying uses for each.

Tacit communication, which is commonly found under constrained conditions. This kind of communication relies upon the existence of specific bits of information held in common or inferred from the situation and is used most often as a communication shortcut.

Nonverbal communication, which deals with transmission of information using nonverbal media with emphasis on the problems and factors involved. It also notes how any innovation will undergo change over time and as it passes through adopters.

Bypass communication, which focuses upon the common error of treating all individuals alike. The package uses technical language to provide an experience demonstrating the differences that exist and the feelings of an individual being bypassed. The participants are allowed to reflect on the frustrating experience of attempting to absorb a large quantity of information in a short time.

Overload communication, which occurs when too much information is given in a short period of time.

Written communication, which is a self-awareness package utilizing messages individually prepared by each participant for a given population. A formula is employed to measure the complexity of the message as an indication of its probable effectiveness in reaching the target population.

Group norms, which deals with the reactions of some members in a group toward the behavior of a deviant member.

Individual versus group, which uses two experiences to demonstrate the differing effects of cooperative and competitive conditions. Group and individual behavior, resulting from the two conditions, are the focuses.

INTENDED USERS AND BENEFICIARIES

The range of potential users is broad. Any group entering or anticipating entering cooperative task-oriented arrangements and which has neither the funds, time, nor inclination to use an outside consultant are the intended users. The materials have been used by public school pupils, teachers, Girl Scout leaders, jail inmates, and businessmen.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To provide self-instructional materials for groups which have entered or are anticipating entering cooperative task-oriented arrangements and which have neither the funds, time, nor inclination to use outside consultants; (2) to help groups become aware of the intricate problems of interpersonal communications; and (3) to develop skills in verbal, nonverbal, and written communications.

PATTERNS OF USE

The program is sequenced in the following order: "One-Way and Two-Way," "Tacit," "Nonverbal," "By-Pass," "Overload," "Written," "Task Group Process I," and "Task Group Process II."

ASSESSMENT PROVISIONS

There is no screening of participants prior to the Ernstspiel experience. The kit is based on group members having a common experience and then having participants analyze and discuss this experience; therefore, there is no formal evaluation since it is possible that common experiences may vary with participating groups.

TIME REQUIREMENTS

Each package requires 1 hour or less to complete. The exception will be packets that contain two or more exercises (such as Tacit Communication and Individual versus Group), in which case separate sessions are recommended.

The time required in each case will depend on the participants' desire to explore, to discuss the experience, and to look for applications of the findings to their particular situation. More importantly, it will depend upon the leader's knowledge and familiarity with the materials and the additional information and experiences brought to the group.

If the materials are being used in a workshop, no more than two packets (or exercises) should be given in a 4-hour period. While it is possible to run all eight packages and the evaluation in 2 days, communication overload and fatigue would defeat the purpose.

Summary Cost Information

A limited number of prototype kits are available at a cost of $94.75.

ASSURANCES AND CLAIMS

Assurances

The evaluative information obtained from field trials of the kit indicates that the materials can stand alone in the hands of users and can be successfully implemented without additional outside consultative assistance. In each of the exercises, people will see some things as relevant which others do not. This is an important consideration in the Ernstspiel kit and in all human relations. Each person experiences different things at different times; no two lives are exactly the same. No two people handle problems or stress in the same manner, nor need they.

It has been found that one package may make little or no sense to an individual until it has been discussed or until some later experience triggers the insight. This should not be a point of discouragement but should sharpen awareness of the uniqueness and complexity of the individuals with whom individuals must live. It is also necessary to be cognizant that some do not listen or understand at a particular time, not because they do not wish to, but because of their inability to replace their own perceptions of what is important with what others perceive to be important. The criterion for what is real or important is determined by the individual's perception of it.

Claims

No claims for effectiveness are made beyond outcomes tested earlier.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 Ernstspiel Kit	1 set per group	94.75*		

*The price charged for prototype kits used in field test.

DEVELOPER/AUTHOR:

Center for Educational Policy and Management
CASEA
Research and Development Division
University of Oregon
Eugene, Oreg. 97401

Francis C. Thiemann, Program Director

AVAILABILITY

A limited number of prototype *Ernstspiel Task Group Communications Kits* are available from:

Francis C. Thiemann
Program Director
MUST Program, CEPM
1472 Kincaid St.
Eugene, Oreg. 97401

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 017

INTERPERSONAL COMMUNICATIONS (IPC)

A program package kit which focuses on the concepts and skills of interpersonal communications in the classroom, community, and one-to-one situations

The *Interpersonal Communications* system includes 20 units which are approximately 90 minutes each. These exercises are designed to be used in sequence and have a cumulative effect.

Educators are frequently involved with communication behaviors that are focused on in these exercises. It is assumed they do not give them much attention. These exercises bring communication behaviors more clearly into awareness and make explicit certain knowledge about communicating.

Improving skills goes beyond clarifying what is already known. Each exercise involves participants in practicing the behaviors which are described, learning ways to recognize these behaviors, and receiving "feedback" from others concerning use. The emphasis is on learning "to do" as well as on gaining knowledge. Many skills in interpersonal communications involve the personal style of the individual. For example, the exact behavior used in "paraphrasing" is a matter of personal style. Many alternative behaviors, with particular contexts, can meet the criteria which define the skill of "paraphrasing." These exercises provide opportunity for participants to become clearer about their personal styles.

To summarize, the sequence of 20 exercises provides 3 kinds of learning: (1) The participant becomes clearer concerning things to know about interpersonal communications, (2) the participant practices what is done personally in interpersonal communications, and (3) the participant becomes able to recognize more clearly personal styles of communicating with others.

Innovations such as team teaching, modular scheduling, and differentiated staffing increase the need for collaboration at all levels. In the traditional system of self-contained classrooms, most educators have carried out their roles in relative isolation. Many potentially valuable innovations have not been implemented successfully due to issues of influence, polarized conflict, and ineffective communication. Increased interpersonal communications skills of school personnel will reduce at least one hindrance to local improvement efforts. This workshop was designed for teachers, but has been found appropriate for virtually all roles in education.

SUBJECT AREA(S)

Participants focus on the concepts and skills of interpersonal communications—in the classroom, community, and one-to-one situations.

INTENDED USERS AND BENEFICIARIES

Classroom teachers, educational administrators, and community populations are the intended users. This system has also been adapted for industry.

GOAL(S) OR PURPOSE(S)

The purpose of an interpersonal communications workshop is to give participants knowledge and skills of behaviors generally applicable to: Face-to-face communication, one's own unique style of communicating, group and organizational factors which affect that communication, and continued improvement of one's communication skills.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes much participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Interpersonal Communications has been deemed appropriate as an initial experience and, therefore, has no prerequisites. Throughout the workshop, participants evaluate their learning by mutual feedback; self-testing, e.g., paper-and-pencil tests; and skill practice.

TIME REQUIREMENTS

There are 20 sessions in this workshop which compose 30-40 instructional hours. It is recommended that this training be given within a 2-week period.

IMPLEMENTATION PROCEDURES

Setting up a workshop is not complex, but its success and effectiveness depend upon several factors:

1. The participants need to be involved. It is best if they have volunteered to be included in the workshop. It is crucial that they have a correct understanding of what the workshop is about and the way in which it is conducted. It is also recommended that, whenever possible, teams or entire school buildings experience the training together. This can create norms for use of new skills which might not be applied if individuals returned and attempted them in settings where there was little or no support for use of the skills.

The basic work group of the workshop design includes six members. It is important that the total group be a multiple of six. These work groups cannot be smaller than six. Some may have seven or eight people if absolutely necessary, but this is awkward and not advised. It is extremely important that all participants be present for every session of the workshop. The design is sequential and cumulative; many exercises depend on roles for trios and sextets. In many instances, participants train each other using criteria provided in the materials.

One leader may work with a total group as large as 36. It is recommended, however, that the total group not exceed 24. The first time an individual is attempting the leader role, it is advisable that only 12 participants be included.

2. The materials are not intended to be self-explanatory. Thus, all new leaders should experience the workshop materials and design as a participant before attempting the leader role. Reports indicate that cotraining with a leader who has previously conducted the workshop is an additional benefit to the new leader.

3. Adequate time is needed to obtain and arrange all the necessary materials and equipment prior to the workshop. The leader must prepare charts in advance of each session as well as arrange materials to be distributed. Timing for such preparation must be carefully considered. It should be clear who is to be responsible for each task.

4. The workshop site should include a comfortable room large enough to allow groupings of three and six. Comfortable chairs and tables for small groups need to be provided. Refreshments should be available in the room, if possible.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

During a series of trial workshops, participants were repeatedly asked for feedback concerning this system. While many criticisms were used to revise the system, and occasionally individuals stated the system's content or form was not relevant for them, there were no reports from participants, trainers, or implementers indicating physical, psychological, or sociological harm. Thousands of copies have been sold since the system became commercially available over 2 years ago. The developers have received no reports of harm or perceived risk during this time.

Assurances of Social Fairness

Social fairness issues were considered during interim rounds of trial and revision resulting in some early modifications of this system. While the generic "he" is sometimes used when referring to persons of either sex, the system is generally fair and has been positively accepted as such. A review panel of curriculum experts gave it a passing rating.

Assurances of Replicability

This system was designed with the intention that those lacking expertise in its content or in providing experiential learning would be able to conduct workshops. The developers observed such nonexperts successfully conduct workshops at two sites during interim testing. No developers were involved in the seven field test workshops, as second- and third-generation trainees conducted them. Of the field test participants, 31 percent reported that they definitely could conduct the workshop and another 41 percent reported that they would be able to do so if some consultant aid or additional help were available. The widespread use of this system throughout the United States and in several other countries during the past 2 years supports a claim of easy replicability.

Claims of Effectiveness

In addition to interim rounds of testing beginning in 1969, final field tests of this instructional system were conducted in 1972 with 167 volunteer trainees at 5 field test sites. Participants at all workshops except one (referred to as site B) were mainly the K-12 educators for whom the system was developed. The site B group consisted of all male faculty members of a small college who had a high proportion of advanced degrees and were unlikely to be taking the workshop for academic, salary, or tenure credit.

A high degree of satisfaction can be expected from participants who are K-12 educators involved because of appropriate expectations in their needs and the nature of this system. From the target-group workshops in the field test, 92 percent of the respondents reported the training met their expectations, 95 percent would recommend it to a friend, and 97 percent summed it up as worthwhile. From the site B workshop, 37 percent reported the training did not meet their expectations, 12 percent would not recommend it to a colleague, and 5 percent did not find the experience worthwhile.

Participants from a K-12 target group involved in an appropriate manner can be expected to generally perceive this training as relevant and useful. Over 85 percent of the participants were positive on all but one questionnaire item (81 percent on that one item) at the end of the workshop. Perceived applicability and personal importance were rated even higher on a followup questionnaire administered 6 months after the workshop.

Participants can be expected to make significant cognitive gains from a workshop using this system. Participants in the field test showed an average gain of 20.2 points (maximum score was 108) on a cognitive test. Seventy percent of the precognitive/postcognitive gain was retained when measured 6 months later. On a followup paper-and-pencil behavioral episode test, 94 percent of the respondents were able to identify at least one communications problem, 89 percent were able to give an appropriate response to the situation presented, and 83 percent accurately described a participant's behavior.

Audiotapes were anlayzed for incidence of five behavioral skills trained for in the workshops. When compared to a group with high experience in interpersonal training and a group with low experience, the test population fell between these two comparison groups after their training.

Some increase of behavioral skill may be expected from use of this system, although its developers caution that "back-home" contextual variables may be an important intervening factor.

Claims of Careful Product Development

This system was developed over a 3-year period involving repeated rounds of trial and revision with K-12 target group representatives. Evaluation included pilot trials, interim formative testing, and a summative field test in which the system's developers were not involved.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	11.00		
Leader's manual	1 for each leader	15.00	Reusable	
9 16mm films and 1 reel-to-reel tape	1 set (tape included)	175.00	Reusable	
Reel-to-reel recorder	1 for session, 12 only		Reusable	Implementer
16mm projector				Implementer
Newsprint, markers, masking tape				Implementer

DEVELOPER/AUTHOR:

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Charles Jung, Senior Author, Program Coordinator
Rosalie Howard, Coauthor
Ruth Emory, Coauthor, Program Associate
Rene Pino, Coauthor, Program Associate

AVAILABILITY

Interpersonal Communications was in its third printing in 1973, and copyright is held by the Northwest Regional Educational Laboratory. It is currently available from the publisher/distributor:

Xicom, Inc.
R.F.D. No. 1, Sterling Forest
Tuxedo, N.Y. 10987

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 018

INTERPERSONAL INFLUENCE

A 20-unit training program designed to increase participant awareness of the consequences of personal communications style on the process of interpersonal influence

Interpersonal Influence is a low-cost, mass-diffusable, competency-based instructional system which includes all materials and procedures for conducting 30 hours of instruction. Organized into 20 instructional sequences or units, it is conducted as an inservice workshop or preservice course for educators.

Each unit in the series has one or more objectives which contributed to the achievement of the overall objectives. These objectives are presented with each unit.

The series of 20 exercises on interpersonal influence has 3 major dimensions: (1) Learning basic concepts about the process of interpersonal influence, (2) identifying one's characteristic styles of using and responding to interpersonal influence, and (3) practicing basic skills of interpersonal influence.

The first dimension provides the opportunity to become more knowledgeable about what is involved in the process of interpersonal influence. Participants will discuss the ideas and derive implications for their own personal style of relationships.

The second dimension will produce an increased awareness of the consequences of one's personal style of relating to others for the process of inter- personal influence. The outcome should be a greater ability to be more explicit about what is desired and acceptable in relationships involving influence.

The focus of the third dimension is a "do it" emphasis. The exercises include opportunities to identify described behaviors, to practice these behaviors, to assess their effects, to receive feedback from others in the group.

This series provides a setting in which issues of interpersonal influence are raised and dealt with. The gained knowledge and skills should enable the participants to be more aware of their own characteristic style of behaving in the influence process. They will then be able to distinguish more clearly among interpersonal influence issues and other interpersonal interaction issues.

During the 20 units of this workshop, participants experience a variety of ways in which they may learn about interpersonal influence. There are written definitions, descriptions, and films and tape recordings to illustrate behaviors of present dilemmas. There are times for reflecting on experiences and ways of doing things; times for discussing ideas, expenses and possible meanings; techniques for observing and analyzing behavior. There are opportunities to share observations with others and to ask for observations and reactions. There are some simulation, task performance and role playing situations in which participants can tryout behaviors.

The system is divided into three parts. In part one, the basic concepts and tools for understanding interpersonal influence are introduced. In part two, attention is paid to characteristic patterns of responses in which the individual engages whenever accepting influence or exerting influence. Part three is concerned with how selected group phenomena influence group development.

SUBJECT AREA(S)

This system is designed to prepare the participants by giving them the concepts and skills necessary to function in the realm of interpersonal influence.

INTENDED USERS AND BENEFICIARIES

Participants include all educational personnel who have an interest in interpersonal influence and who volunteer for the training.

GOAL(S) OR PURPOSE(S)

The activities called for in the instructional system are designed to provide the: (1) Ability to identify and explain the major ideas that describe the process of interpersonal influence as presented in the system; (2) capability for using guidelines provided to diagnose and analyze forces and effects of influence in selected interpersonal and group situations; (3) ability to identify and make judgments about one's characteristic influence styles; (4) ability to identify extent and nature of one's own need to influence; and (5) capability for identifying ways in which principles learned and guidelines utilized in the workshop may be applied in settings other than the workshop.

Each unit in the series has one or more objectives which contributes to the achievement of the overall objectives. These objectives are presented with each unit.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes a great deal of participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Interpersonal Influence has been deemed appropriate as an initial experience and, therefore, has no prerequisites. Throughout the workshop, participants evaluate their learning by mutual feedback, self-testing, e.g., paper/pencil tests, and by skill practice.

TIME REQUIREMENTS

This system has 20 units organized into 30 hours of instruction. It can be conducted as either a preservice class or an inservice workshop.

IMPLEMENTATION PROCEDURES

An interpersonal influence workshop can be successfully conducted with as few as 10 and as many as 36 participants. The instructional system is designed for basic learning groups of six, although each learning group could have as few as five or as many as seven members. The workshop needs to have at least two learning groups to ensure an interesting and productive experience for participants.

A workshop leader gives instructions from a manual and guides participants through the training program. The leader needs to be familiar with the materials and design, but does not need to be an expert in the interpersonal influence process.

All new leaders should experience the workshop materials and design as a participant before attempting the leader role. Initial cotraining with a leader who has previously conducted the workshop is an additional benefit to a new leader. Leaders without extensive experience in design should be cautioned concerning possible revisions, additions, deletions, or defense of this process as "the only way."

The workshop site should include: Comfortable room, preferably carpeted, large enough to allow groupings of five to seven to work without interfering with each other; comfortable chairs and tables for small groups; and beverages and refreshments available in the room, if possible.

ASSURANCES AND CLAIMS

Harmlessness

During a series of trial workshops, participants were repeatedly asked for negative feedback concerning the system. While criticisms were used to revise the system, there were no reports of physical, psychological or sociological harm from participants, trainers, or implementors.

Social Fairness

Social fairness issues were considered during interim rounds of trial and revision, resulting in some early modifications of this system. Guidelines suggested by the NIE program monitor were followed in efforts to eliminate sex bias. A review panel of curriculum experts gave it a passing rating.

Replicability

This system was designed with the intention that nonexperts in its content or in providing experiential learning would be able to conduct workshops. A study was conducted of second-generation trainers conducting the workshop under three different condition (training alone, without supervision; training alone, with supervision; and training with teams, without supervision). There were no significant differences in outcomes for participants of these trainers concerning workshop relevance, utility, satisfaction, scores on cognitive tests, or participant perceptions of the capabilities of the trainers. These data support the claim of ease of replicability of workshops using this system.

Effectiveness

Results are available from an interim field-trial evaluation report and a followup survey of participants trained in *Interpersonal Influence*. A final impact study is still being completed in 1975. The interim field test involved 22 subjects who served as trainers for the instructional system and 216 subjects who served as participants in the 16 interpersonal workshops. Followup questionnaires were obtained from the participants 4 months after their workshops. Data from these workshops provide the following results: (1) Ninety-seven percent of the participants responded positively to a question indicating that they had found the workshop worthwhile and 92 percent indicated that they would recommend the workshop to a friend; (2) field test participants indicated the workshop was both relevant and useful upon concluding it and again, 4 months later; (3) significant cognitive gains were achieved on a locally-developed test. The mean of pretest scores of 20.08 rose to a mean of 29.8 on the posttest; (4) on the followup questionnaire, 92 percent of the respondents reported some increase in awareness of influence behaviors in their "back home" setting; and (5) participants were able to identify application of specific concepts and skills from the workshop in their "back home" settings.

Product Development

This system was developed over a 3-year period involving repeated rounds of trial and revision with K-12 teachers and administrators. Evaluation included pilot trials, interim formative testing, and summative field test with an impact study being completed during 1975.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 per participant	To be announced		
Training manual	1 per trainer	To be announced	Reusable	
Set of 4 or 5 films		To be announced	Reusable	
Cassette tape		To be announced	Reusable	
Newsprint	2 pads			Implementor
Magic markers	1 dozen			
Masking tape	2 rolls			
Pennies	10 per participant			
16mm projector	1		Reusable	Implementor
Cassette recorder	1		Reusable	Implementor

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. Second Avenue
Portland, Oreg. 97204

Ruth Emory, Developer/Author, Program Associate
Rene Pino, Developer/Author, Program Associate

AVAILABILITY

Interpersonal Influence **is copyrighted and copyright is held by the Northwest Regional Educational Laboratory. It will become available in spring of 1975 through the publisher:**

Xicom, Inc.
RFD 1, Sterling Forest
Tuxedo, N.Y. 10987

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 019

ORGANIZATION DEVELOPMENT: BUILDING HUMAN SYSTEMS IN SCHOOLS

An introduction to organizational development theory and practice

Organization Development: Building Human Systems in Schools is a 50-page booklet introducing the conceptualization and strategy of organization development to professional or lay readers. The contents are divided into sections which present theory, discuss activities and techniques, describe a training sequence, and include a short bibliography.

The booklet provides easily understood information about organization development based on systems theory. *Organization Development* is for groups or faculties who realize that the quality or result of an educational program depends on the quality of the people-with-people interaction that makes the program work. It is the human involvement and commitment in the interpersonal community—not the formal rules and procedures—that make a school run efficiently. *Organization Development* aims at helping people in schools develop increased interpersonal competence in carrying out their educational program together.

This booklet is not a guide to consultant work but does familiarize readers with many ideas and practices in consultation. It could be used as a basis for discussion by administrators or staff considering organizational development as a way to bring about changes in their school.

SUBJECT AREA(S)

Organization Development (OD) discusses the following topics: (1) A view of schools and the process of change, (2) organizational development helps schools become self-renewing, (3) organizational development can be a permanent part of a self-renewing school district, (4) organizational development makes a difference, (5) the stages and a sample training sequence in OD, (6) individuals and programs concerned with organizational development in schools, and (7) writings and references of interest.

INTENDED USERS AND BENEFICIARIES

School staffs, students' parents, and community people who want an introduction to the concepts and practice of OD in schools are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

The goals of this publication are to present information and to stimulate discussion about organizational development in schools.

PATTERNS OF USE

It should be used alone or in conjunction with the audio/slide presentation, *"Organization Development in Schools."*

TIME REQUIREMENTS

It should be read individually. The booklet can be the basis for one session of group discussion.

ASSURANCES AND CLAIMS

The product does not perpetuate social biases and is transportable. It informs and provides a base for discussion.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Organization Development: Building Human Systems in Schools (booklet)	1 per person	1.75		

DEVELOPER/AUTHOR:

Center for the Advanced Study of Educational Administration
University of Oregon
Eugene, Oreg. 97401

Richard I. Arends, Author
J.H. Phelps, Author
R.O. Schmuck, Author

AVAILABILITY

Organization Development: Building Human Systems in Schools **is available from:**
CEPM Publications Department
University of Oregon
Eugene, Oreg. 97401

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 020

ORGANIZATION DEVELOPMENT IN SCHOOLS (AN AUDIO SLIDE PRESENTATION)

A slide show on how the school community can serve as a source of innovative programs in the schools

This slide show, *Organization Development in Schools*, consists of slides for a carousel projector and an accompanying cassette tape. It is supplemented by the booklet *Organization Development: Building Human Systems in Schools*, but it can be used alone.

The slide show presents the idea that the people most directly concerned with the school—the staff, students, parents, and citizens—have much of the knowledge and skill needed to create and implement many new programs.

SUBJECT AREA(S)

The subject area is organization development in school settings, stating that the people most affected by school problems are the best ones to work out and implement solutions.

INTENDED USERS AND BENEFICIARIES

The intended users are school staffs, students, parents, and community people who want an initial understanding of organization development.

GOAL(S) OR PURPOSE(S)

The purpose of this program is to give a simple introduction to organization development in school settings.

PATTERNS OF USE

This product can be presented in a single showing to an interested group. It is designed to be supplemented by the booklet *Organization Development: Building Human Systems in Schools*. It is suggested that the slide show be followed by opportunity for questions and discussion.

TIME REQUIREMENTS

One meeting (30 to 60 minutes), depending on discussion time is required.

ASSURANCES AND CLAIMS

The slide show and accompanying cassette tape do not perpetuate social biases and are transportable. The material will stimulate questions and discussion.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Audioslide package *Organization Development in Schools*	1 set	50.00		

DEVELOPER/AUTHOR:

Program on Strategies of Organizational Change
Center for the Advanced Study of Educational Administration
University of Oregon
Eugene, Oreg. 97401

Richard I. Arends, Author
J. H. Phelps, Author
M. Harris, Author
R. A. Schmuck, Author

AVAILABILITY

The audioslide presentation is available from:
CEPM Publications Department
University of Oregon
Eugene, Oreg. 97401

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 021

PROJECT MANAGEMENT BASIC PRINCIPLES

A multimedia, self-instructional package to improve school-personnel-project-management techniques

Project Management Basic Principles is a training product that teaches school district staffs to plan, implement, operate, and terminate an educational project and to attain project objectives within the given time, cost, and performance constraints. Any school personnel likely to be assigned responsibility for managing an improvement project would find this product useful. This includes project staff, school administrators, school district central office staff, undergraduate and graduate educators, community agencies' personnel interacting with schools, and supportive staff agencies such as State departments of education having liaison with local schools.

The product does not purport to provide complete training for a project manager. For example, the development of human relations skills is not treated. Rather, the product concentrates on the improvement of the tools or techniques of project management.

Specific areas covered by the product are: Defining the project goal, developing the project work breakdown and workflow diagram, preparing time estimates, estimating and scheduling resources, developing the project budget, planning project "startup," developing an information system and a procedures handbook for the project, monitoring project operations, problem solving through management action, implementing any changes in project operations, and developing a project termination plan.

The product consists of 3 looseleaf notebooks divided into 12 lessons. There are also 12 filmstrips and 12 synchronized tape cassettes. The notebooks include a manual to guide self-study and a case simulation which enables users to role play and practice the knowledge and skills presented in the lessons. Materials also include user management instructions, learning objectives, a content script, exercises, examples, and self-assessment instruments. In each lesson, the learner has an alternative of viewing the filmstrip, reading the content script, listening to a tape, or a combination of these. The product provides a mixture of individual and group activities. Each of the lessons can be easily modified to apply to a wide range of school district projects or program activities.

SUBJECT AREA(S)

Planning and administration.

The product emphasizes the development of user knowledge and skills required to effectively manage a project in a school district setting. These skills allow the user to perform such management tasks as: (1) Developing a project plan including work structure, workflow diagram, time estimates, and a budget; (2) preparing for the startup of a project; (3) monitoring the operation of a project; and (4) handling the termination or orderly transition of a project into an ongoing program.

INTENDED USERS AND BENEFICIARIES

The training product is intended for use by project staff personnel, school administrators, school district central office staff, undergraduate and graduate educators, community agencies' personnel interacting with schools, and supportive staff and agencies such as State departments of education having liaison with local schools.

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school districts manage projects more effectively, thereby meeting time, cost, and performance expectations for their school improvement efforts. This is accomplished by providing users with the knowledge and skills necessary to plan, prepare, operate, and terminate a project.

PATTERNS OF USE

The material is self-contained and requires no specially trained individual for use. Lessons are grouped into four phases according to the lifespan of a project and usually are studied sequentially.

The material, however, is quite flexible and, as a result, can be adapted to a variety of school district needs. This can include the development of different management skills or the adaptation of the materials to special kinds of projects in school districts of varying complexity. Consequently, users may choose to obtain consultation or assistance from the developer.

ASSESSMENT PROVISIONS

Evaluation instruments are interspersed throughout the product lessons. Students assess their own performance using criteria provided in the lessons. The case simulation included in the materials provides for group or individual performance of the management tasks learned and feedback on that performance.

TIME REQUIREMENTS

The time required to study the materials varies from 24 to 40 hours, depending on the study options selected.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a district to use the product. It is recommended, however, that one person coordinate the training of the other staff members. Also, it is recommended that top-level administrators in the district use *Project Management Executive Orientation* before other staff are trained in the use of this product. In this manner, the users will have the support necessary for implementing many of the procedures they learn into their day-to-day work.

Many users have found it beneficial to view lesson audiovisual presentations for a second time or to refer to printed lesson material during the course of their project management work in the district. Therefore, it is recommended that the materials be kept readily available to project managers after the initial training sessions.

Summary Cost Information

If, for example, a district chooses to train 10 project managers using the audiovisual and printed materials, then the cost would be $60 for 1 set of filmstrips and accompanying cassette tapes, and $200 for 10 sets of volumes I, II, and III—yielding a total of $260. The cost of training other project managers in subsequent years would be less since the audiovisual materials are reusable.

Personnel Required for Product Adoption and Implementation

The product can be used by an individual or group of district staff without previous training in project management or educational administration. Districts may choose, however, to obtain consultation or assistance from the developer for initial staff training or adaptation of the materials to special needs. Costs for different services can be obtained from the developer.

ASSURANCES AND CLAIMS

Assurances

The subject of the product is rational management procedures for use by school district administrators/project managers. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

Steps have been taken to insure that the product excludes social bias. During the pilot and field testing of the product, school district personnel brought incidences of bias to the attention of the developers. As a result, changes were made to both the audiovisual and printed materials.

The product has been used by school districts of various sizes in different regions of the United States with comparable results in terms of the user's improved ability to perform project management tasks associated with planning, preparing, operating, and terminating a project. Users have been able to continue training staff without the assistance of the developer.

Claims

The product increases the ability of project managers in local school districts to perform the project management tasks of each of the phases in the project management process. This claim is based on a summative evaluation conducted during 1973 involving several school districts in different States.

Particular attention has been given to the quality of the product's content and instructional process. Product development involved the steps of analysis, conceptualization, design, construction of prototype, pilot testing and revision, field testing and revision, and summative evaluation. The steps of analysis, conceptualization, and design involved a task analysis of project management in schools, a review of literature on project management and instructional system design, and consultation with experts in project management and instructional system design. The construction of the prototype involved the developer and project management expert in the writing of lesson material. The pilot testing, field testing, summative evaluation, and revisions of the product involved project managers from school districts in several States and many other knowledgeable educators. This developmental process has been carefully documented.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Project Management Basic Principles				
Vol. I	1 per student	7.50	Consumable	
Vol. II	1 per student	7.50	Consumable	
Vol. III (case simulation)	1 per student	5.00	Consumable	
12 filmstrips and 12 cassette tapes (optional)	1 per class	60.00	Reusable	

Note: If the optional filmstrips are used, a cassette tape recorder, a filmstrip projector, and viewing screen are necessary. These are generally available in school districts.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The development of the product is complete except for final packaging changes and is available from the developer. The written manual portion of the product will be available in a compact final package by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 140 022

PREPARING EDUCATIONAL TRAINING CONSULTANTS: SKILLS TRAINING (PETC-I)

Two-week workshop to train participants in diagnosing individual and group needs in the process skills of goal setting, communicating, and decisionmaking

PETC-I, the first in the series of three PETC systems, is constructed to be a prerequisite to the other two programs. The intended relationships among the PETC systems are shown under "Patterns of Use." The PETC-I trainee is expected to be able to work with small groups to assist in improving process skills such as goal setting, problem solving, communicating, influencing, and decisionmaking.

The PETC-I system is a 2-week workshop that is organized into two parts. The first part of the program consists of a 1-week training program during which the PETC-I trainees (skills trainers) study the basic concepts of the instructional system. Also during the first week, the skills trainers are provided with a series of exercises to practice group-skills training. The PETC-I workshops are conducted by senior trainers who meet specified criteria.

The second part of the workshop is a practicum for the skills trainers. During the practicum, the skills trainers form trios and each trio works with a group of 12 to 24 people. The second training week is referred to as the *Group Process Skills* (GPS) workshop, and the second set of participants are called GPS trainees. These sessions, which are conducted over a 5-day period, are designed to allow GPS trainees to obtain training in group-process skills from the trio of skills trainers. The techniques and strategies of group-process exercises are applicable to any group of people for whom the materials are new. For this reason, no prerequisite skill level has been stated for a GPS participant. It is anticipated that a wide range of skills will appear in any group with which the skills trainers work. The only requirement for GPS participants is that they commit themselves to attend each session of the group-process skills workshop.

SUBJECT AREA(S)

PETC-I is designed to train participants in diagnosing individual and group needs in the area of process skills such as goal setting, communicating, influencing, or decisionmaking. In addition, this workshop prepares the participant to function as a skills trainer to conduct group-process skills workshops.

The materials for the sessions consist of a book of theory papers and training materials for the skills trainers, a book of theory papers for the GPS trainees, a GPS trainer's manual used by the skills trainers, and a book of group skill exercises used by the skills trainers during the GPS workshop.

Throughout the entire two-part workshop, the Do-Look-Learn approach is used. First, the participant is involved in DOING something which will provide a common activity for all workshop members to LOOK at. LEARNING follows by examining what happened in the activity and linking it to similarities and differences within one's own organization.

INTENDED USERS AND BENEFICIARIES

The first part of this system is intended for use with educators at any level who wish to acquire consulting skills for training others in group process and interpersonal skills. The second part of this workshop is intended for use by classroom teachers, aides, support staff, parents, and others in the educational setting who wish to improve their group and interpersonal skills.

GOAL(S) OR PURPOSE(S)

The general goal of PETC-I is to teach participants to train others in process skills and to facilitate the functioning of small groups. Part I, *Skills Trainer's Workshop*, involves preparing skills trainers to use exercises in part II, *Group Process Skills* (GPS) *Workshop*. Part II allows skills trainers to practice while they conduct a workshop for others in Group Process Skills. The PETC-I program has been designed to prepare these skills trainers to assist in a variety of situations to increase the effectiveness of a group's functioning.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

PETC-I objectives can best be met by having previously attained a high degree of competence with those skills taught in research utilizing problem solving and interpersonal communications. Because PETC-I prepares the individual for training others in Group Process Skills, previous training experience with these systems is also required.

Throughout the workshop, participants evaluate their learning by mutual feedback, self-testing (e.g., paper/pencil tests), and skill practice. In addition, a senior trainer is available for consultation.

TIME REQUIREMENTS

Total time required is 2 weeks for skills trainers. Participation in the Group Process Skills workshop requires 1 week.

IMPLEMENTATION PROCEDURES

The PETC-I senior trainer should complete all prerequisites for PETC-I including *Interpersonal Communications* (IPC) and *Research Utilizing Problem Solving* (RUPS) or have other comparable training experiences. During part II of the workshop, the senior trainer functions as a resource for the skills trainers.

Participants for PETC-I skills trainers are usually selected from those people who can be useful as trainers in their back-home settings. Prerequisites for attending PETC-I as a potential skills trainer include IPC and RUPS. Perhaps the most important prerequisite is that participants make a commitment to attend every session of the two-part workshop. PETC-I training is sequential and cumulative; much of it is also completed in team/trio arrangements.

Team assignments are made by the senior trainer according to several criteria. Some of these may include the preference of certain participants to work or not to work as a team, ease of location and planning times available, and apparent skill-level needs and intentions for future use.

An orientation kit for the host organizer of a PETC-I workshop has been prepared. This kit delineates the different responsibilities of the host and the senior trainer, gives a list of necessary materials and a partial list of supplies, and presents a sequential preparation checklist for the host to follow in arranging for a local PETC-I workshop. Two information fliers have also been developed to allow a potential participant in either part of PETC-I know what to expect to gain from participation and the obligations (both cognitive and affective) to the PETC-I program and teammates. A sample of each of these fliers is included in the orientation kit.

An ideal workshop size for a PETC-I senior trainer includes 12 skills trainers. It is possible to work with 15-18 participants; but due to the team/trio design of PETC-I, the total number should be a multiple of 3.

During the GPS workshop, the senior trainer serves as a resource to the skills trainers. The senior trainer is present to work with any of the teams as they experience the strategies and techniques through trying to train others in group-process skills.

Part I requires a spacious room with movable and comfortable furniture. It should be large enough to allow trio work to continue with a low-noise level, yet small enough that a senior trainer can observe each group's progress and problems. Tables for planning sessions are very helpful. The location should eliminate as many distractions, e.g., ringing phones and outside disruptions, as possible.

A similar room is needed during the GPS workshop for each team of skills trainers. In addition, a general meeting room is necessary for the senior trainer to hold conferences and to allow access to the GPS materials whenever a team decides upon the exercises to be used.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

This system is still under development and testing. During preliminary trials and interim testing, users of this system have been repeatedly asked for feedback. There have been no reports to date of actual instances of physical, psychological, or sociological harm.

Assurances of Social Fairness

Social fairness issues have been considered in creating and revising these materials. They have been accepted as fair by users.

Assurances of Replicability

This system was created for use by persons experienced in the content of the system and in conducting experiential training designs. Trainer capability is an issue currently under study. Results will be reported by November 1975.

Claims of Effectiveness

Evaluation studies are being concluded and will be reported by November 1975.

Claims of Careful Product Development

This system is being developed over a 4-year period involving repeated rounds of trial and revision. Evaluation includes pilot trials, interim formative testing, and a field test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Preparing Educational Training Consultants: Skills Training, part I:				
Participant materials	1 for each trainee	To be announced		To be announced
Catalog of exercises and theory papers	1 for each trainee	To be announced		To be announced
Trainer's materials	1 for each trainer	To be announced	Reusable	To be announced
Newsprint, felt-tip pens, masking tape, name tags, art supplies				Implementer
Preparing Educational Training Consultants: Group Process Skills, part II:				
Participant materials	1 for each trainee			To be announced
Trainer's materials	1 for each trainer		Reusable	To be announced
Collection of exercises	1 complete set per workshop		Partial replacement	To be announced
Newsprint, felt-tip pens, masking tape, name tags, art supplies				Implementer

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

Rene Pino, Author/Developer, Program Associate
Ruth Emory, Author/Developer, Program Associate
Charles Jung, Coauthor/Developer, Program Coordinator

AVAILABILITY

Preparing Educational Training Consultants: Skills Training (PETC-I) will be available in fall 1975 from a distributor yet to be announced. Copyright will be held by Northwest Regional Educational Laboratory.

INFORMATION CURRENT AS OF MARCH 1975 ■

PREPARING EDUCATIONAL TRAINING CONSULTANTS: CONSULTING (PETC-II)

The second part in a series of three instructional programs designed to introduce participants to comprehensive diagnostic and intervention models which facilitate instructional or organizational innovation

PETC-II is the second in a series of three cumulative and sequential instructional systems designed to help a cadre of educators acquire process training and consulting skills.

The PETC-II graduate should be capable of forming a temporary relationship with a small group or major subsystem of an educational organization to help make progress toward goals and/or to use these skills to improve that part of the organization over which the graduate has managerial responsibilities. Participants help by diagnosing the organization's problems and providing assistance that will temporarily add to or strengthen such functions as managing, planning, and producing. This allows the group to more adequately accomplish its immediate goals.

PETC-II materials consist of a set of trainee materials (a trainee manual), a set of instructional strategies (a trainer's manual), and a set of orientation papers which introduces the system and outlines procedures for installing or starting up a PETC-II workshop. The trainee materials include theory papers, diagnostic instruments, and instructions for executing learning activities. The instructional strategies consist of a set of the trainee materials interspersed with detailed directions for conducting the 11 PETC-II training sessions.

A PETC-II workshop is divided into three parts, the first consisting of three consecutive 10-hour days of instruction in basic concepts of consulting. A typical workshop includes 10 to 15 trainees and 2 trainers. Trainees are introduced to a variety of conceptual models and schemes related to planned change. These include models developed by Lewin (1951) and Lippitt (1958) and comprehensive diagnostic and intervention models developed especially for this instructional system. Part II is a 3-day practicum in which trainees engage in consulting projects with client systems prearranged by the workshop sponsor. Part III concludes the training with 3 days of debriefing, evaluation of the consulting practicum, and integrating learnings of the workshop.

The population of potential trainees includes educational personnel who occupy or seek roles with responsibility for staff training, organization or program development, or implementation of instructional or organizational innovations. These trainees are expected to come from private and public educational systems such as State departments of education, school districts, universities, and educational associations. It is expected that trainees will have become involved in the training through their own personal commitment, rather than as a result of imposed requirements.

Trainees are required to have completed several other instructional systems developed by the Northwest Regional Educational Laboratory (NWREL) or to possess equivalent experience. These systems include *Interpersonal Communications*, *Research Utilizing Problem Solving*, *Interpersonal Influence*, and *PETC-I: Skills Training*. It is assumed that these prerequisite workshops provide trainees with important knowledge and experience which form the foundation for PETC-II training. It is also assumed that training will be more productive when all trainees in a workshop have become familiar with the norms and values of the learning style employed by these systems.

The kinds of organizations that are expected to sponsor PETC training include private and public educational institutions such as universities, colleges, State departments of education, and school districts.

Potential client groups of PETC-II consultants generally include intact task groups of educators who are experiencing some kind of problem or difficulty that is keeping them from reaching their goals. However, it would be appropriate for a person with PETC-II skills training to consult with any part of an organization which desires help in improving its organizational health or effectiveness.

RD 140 023

SUBJECT AREA(S)

Preparing Educational Training Consultants: Consulting (PETC-II) focuses on consulting in a temporary relationship with a client system to add or strengthen a function as needed. Participants learn to apply differential diagnostic and intervention techniques.

INTENDED USERS AND BENEFICIARIES

Educational personnel with a high degree of expertise in process training benefit most.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to prepare educational training consultants to apply differential diagnostic techniques and differential intervention strategies in temporarily helping a client system add or strengthen a function to realize a value or attain a goal and to diagnose competencies and derive an explicit rationale for assuming the consultant role.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, planning, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

PETC-II objectives can best be met by having previously attained a high degree of competence with those skills taught in the following systems: *Interpersonal Influence*, PETC-I, and associated systems. Because PETC-II prepares the individual for training others in group process skills, previous training experience with these systems is also required.

Throughout the workshop, participants evaluate their learning by mutual feedback, self-testing (e.g., paper-and-pencil tests), and skill practice. In addition, a senior trainer is available for consultation.

TIME REQUIREMENTS

This system requires 54 hours of training, 21 hours of individual study, and 9 hours of practical experience with the client. Nine days of concentrated time, or 3 weeks of three 3-day sessions, are required.

IMPLEMENTATION PROCEDURES

The trainer and installer of a PETC-II workshop may or may not be the same person. However, the trainer's manual includes a set of orientation papers which outlines procedures for installing or starting a PETC-II workshop.

ASSURANCES AND CLAIMS

This system is still under development and testing at the time of this writing. During preliminary trials and interim testing, users of this system have been asked repeatedly for feedback. There have been no reports to date of instances of, or serious concern about, physical, psychological, or sociological harm.

Social fairness issues have been considered in creation and revision of these materials. They have been accepted as generally fair by users.

This system was created for use by persons experienced in the content of the system and in conducting experiential training designs. Trainer capability is an issue currently under study. Results will be reported by November 1975.

Evaluation studies are currently being concluded and will be reported by November 1975.

This system is being developed over a 3-year period involving repeated rounds of trial and revision. Evaluation includes pilot trials, interim formative testing, and field testing.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	To be announced		To be announced
Training manual	1 for each trainer	To be announced	Reusable	To be announced
Cassette recorders	1 for each training team		Reusable	Implementer
Cassette tapes			Reusable	Implementer
Newsprint				Implementer
Magic markers				
Masking tape				
Name tags				
Resource library (approx. 25 books)	1 copy of each book		May be purchased or borrowed from library	Implementer

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
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AVAILABILITY

Preparing Educational Training Consultants: Consulting (PETC-II) will be available by fall 1975 from a distributor to be announced. Copyright will be held by the Northwest Regional Educational Laboratory.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 024

PREPARING EDUCATIONAL TRAINING CONSULTANTS: ORGANIZATIONAL DEVELOPMENT (PETC-III)

*An 8-month workshop and inservice training program
designed to develop individual skills in designing
and maintaining organization change*

Preparing Educational Training Consultants: Organizational Development (PETC-III) is the last in a sequence of seven instructional systems developed by the improving teaching competencies program (ITCP) of the Northwest Regional Educational Laboratory (NWREL) to provide organizational development skills for educational managers and consultants. It is also the third in a series of three PETC systems. PETC-III provides participants with the opportunity to acquire the knowledge, skills, and sensitivities that constitute a change process termed *"Organizational Development"* (OD). It provides training in helping an educational organization achieve structural and normative change to build in and maintain improved functional capabilities when desired and feasible and to develop functions which will enable it to change the kinds of objectives it sets for itself and utilize new kinds of resources in attaining its objective.

What is *Organizational Development* (OD)? OD is a strategy for organizational change. It is a set of practices that have evolved in industrial, governmental, and (more recently) educational settings. The purpose of OD is to improve organizational health and effectiveness. OD aims to help people increase their competencies so they can more effectively manage the human component of their organizations. The basic strategy of OD is to provide training and consultation that involve managers in identifying, diagnosing, and modifying the norms, structures, and processes of their organization. Through these normative, procedural, and structural changes, it is intended that the organization's effectiveness and health will be improved. OD is based on pieces of theory emanating from the models of "planned change" (Lippitt, Watson, and Westley, 1958; Havelock, 1970, 1972) and "action research" (Lewin, 1947; Coch and French, 1948; Lippitt and Jung, 1967). It also incorporates intervention strategies (tested by Seashore and Bowers, 1970; Schmuck and Runkel, et al., 1972).

Organizational development cases involve such things as: (1) Problems of communication (particularly upward), (2) intergroup conflict, (3) leadership issues, (4) questions of identity and destination, (5) questions about satisfaction and the ability of an organization to provide adequate and appropriate inducements, and (6) questions of organizational effectiveness. In other words, three categories of problems which are often addressed by OD are: (a) Problems of destiny-growth, identity, and revitalization; (b) problems of human satisfaction and development; and (c) problems of organizational effectiveness and organizational health.

PETC-III training is spread over a time period of 8 months. During this period, the PETC-III trainees complete a 1-day preworkshop assignment, attend 17 days of workshop meetings, and spend a minimum of 10 days conducting an organizational development project with a predetermined client group.

An organizational development project focuses on the organization (not individuals, committees, or groups of individuals) with a view toward building into and maintaining improved ways of functioning in the organization. The project is a series of interventions based on data collected and analyzed which aim at structural and normative changes to improve the functioning of the organization. A project may be conducted in one part of the organization or in the organization as a whole. An organizational development project becomes possible when the organization's needs and desires have the potential for providing new or increased areas of functional capability on a continued basis.

The system, in its present form, consists of a set of participant materials, strategies to be used with educational managers in a workshop setting, some preliminary plans for installing a PETC-III training program, and strategies to help those trained in PETC-III to use their skills in bringing about structural and normative changes in their schools and to provide organizational training and consultation for client groups.

SUBJECT AREA(S)

This system is designed to be the culmination of seven systems to train people to function as organizational developers.

INTENDED USERS AND BENEFICIARIES

This system will prepare educational managers and consultants to provide organizational development skills to the members of an agency or group.

GOAL(S) OR PURPOSE(S)

The PETC-III instructional system prepares participants to become educational training consultants. As a result of training, consultants are expected to be able: (1) to identify and explain the major organizational development, conceptualization, and intervention strategies that are presented in the PETC-III instructional system; (2) to meet with a potential client group and translate this group's difficulties into a specific problem or problems on which the group wishes to work; (3) to establish a definite and workable relationship and contract with a client group; (4) to collect information from the client group so that the group's problem(s) may be diagnosed and clarified; (5) to design, provide, and assess the effectiveness of intervention activities that allow the client group to explore and examine alternative norms, processes, and structures; (6) to design, provide, and assess the effectiveness of intervention activities that allow the client group to accomplish normative, procedural, or structural changes resulting in increased functional capability in the organization; and (7) to achieve a terminal relationship with the client group by gradual withdrawal and by establishing structures and procedures to substitute for the services provided by the consultant.

At another level, however, it is possible to predict observable changes in a client group that receives consultation. Specific examples follow:

1. Improved problem-solving capabilities—As a result of training in an organizational development, client groups may become more adept at problem solving. They may become more able to sense problem situations, differentiate between kinds of problems, and attend to problem situations with shared and explicit problem-solving procedures.

2. Improved management of interpersonal processes—As a result of training in organizational development, client groups may become more adept at combining people's efforts to achieve desired task goals. It is expected that vertical and horizontal communication may become more open, shared, and accurate; influence may become more shared and equalized; decisionmaking may become more diffused, characterized by explicit procedures and involvement of those who will be affected by, or who are responsible for, implementation of the decisions and coordination may become more explicit and accepted.

3. Improved procedures that support personal and professional growth—As a result of training in organizational development, client groups may become more adept at viewing personal and professional development as an ongoing function necessary to the growth of the group. Therefore, it is expected that the group may provide increased training opportunities for members to meet new organizational needs; increased learning resources so members can be continuous learners; and increased feedback, formally and informally, so members can move toward new ways of understanding.

4. Improve ways the organization attributes meaning—As a result of training in organizational development, client groups may become adept in the ways they see and explain themselves to the rest of the world. It is, therefore, expected that the group will have goals which are clear and in which members have a sense of ownership. The group will also respond appropriately to outside demands.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions as well as full preparation for them.

ASSESSMENT PROVISIONS

PETC-III objectives can best be met by having previously attained a high degree of competence with those skills taught in the following systems: *Social Conflict and Negotiative Problem Solving*, *Preparing Educational Consultants: Consulting* (PETC-II) and associated systems.

The PETC-III instructional system prepares participants training, consultants are expected to be able: (1) To

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Four monographs. Topics to include: Conceptual framework of PETC Strategies for preparing educational training consultants The design for training OD specialists (PETC-III) Case studies in OD	1 set for each trainer	To be announced	Reusable	To be announced
Participants need: Monograph 1 (central ideas) Participant materials book	1 of each per participant	To be announced	-	To be announced

DEVELOPER/AUTHOR

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Ruth Emory, Coauthor, Program Associate
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Richard Arends, Author, Senior Associate
William Ward, Coauthor, Senior Associate
Marilyn Rieff, Coauthor, Staff Specialist

AVAILABILITY

Preparing Educational Training Consultants: Organizational Development (PETC-II) (four monographs) will be available fall 1975 from a distributor to be announced. Copyright will be held by the Northwest Regional Educational Laboratory.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 025

PROJECT MANAGEMENT EXECUTIVE ORIENTATION

A multimedia training product to introduce top-level school administrators to the concepts and techniques of project management

Project Management Executive Orientation is a multimedia training product for top-level school administrators which introduces them to the basic concepts and techniques of project management, the advantages and limitations of project management, the requirements and organization of a project-management system, and their role in supporting improvement projects in their schools.

The product is designed as an orientation, not as a skill-development package. Before a school district adopts a project management approach, it is important for top-level administrators to understand the advantages, limitations, and requirements presented by this product.

The product is divided into four sequenced lessons: The first lesson deals with the potential benefits accruing to local education agencies from applying project management concepts and techniques. The second lesson acquaints administrators with the alternative organizational arrangements appropriate for project management in a school setting. The third lesson covers the life cycle of a project and the kinds of support and assistance needed by the project director. The final lesson discusses where administrators can find additional information on project management and its application in a local school organization.

Instructional materials include a manual and four filmstrips with synchronized tape cassettes. The manual can be used alone, the filmstrip and tape cassettes can be used alone, or both may be used together.

SUBJECT AREA(S)

Planning and administration.

The product emphasizes the benefits of project management for a school district and the role of top-level administrators in supporting project activities. This is accomplished by covering such topics as: (1) Definition of a project and project management, (2) examples of the application of project-management procedures, (3) adapting project management to school operations, and (4) top-management support and coordination of projects.

INTENDED USERS AND BENEFICIARIES

Although the training product is intended primarily for top-level administrators, it can also be valuable to school board members and selected community members.

GOAL(S) OR PURPOSE(S)

The goal of the product is to orient top-level school administrators to the use of project-management procedures for improving the effectiveness of many school operations or activities including the implementation of improvement. The major objectives are: (1) To provide top-level administrators with basic knowledge of the project-management process, (2) to inform top-level administrators of the benefits of the project management approach for a local school district, (3) to acquaint top-level administrators with the kind of support and assistance that they and functional departments need to provide the project manager and the ongoing project operations, and (4) to inform top-level administrators where additional information and assistance regarding project management and its implementation in local education agencies may be found.

PATTERNS OF USE

The product is a self-contained unit and can be used individually or in a group workshop. Lessons should be studied in the order of their appearance. Although the product is self-contained, users may choose to obtain consultation or assistance from the developer. School districts have used the product with and without assistance.

ASSESSMENT PROVISIONS

Since the product is designed to serve as an orientation for top-level administrators, no provisions for assessment are needed or desired. During product development, assessment instruments were included in order to help provide information for product improvement. As a result of formative evaluation activities, the developer found that the inclusion of assessment instruments in the final product was not desirable.

TIME REQUIREMENTS

The time required to study the materials varies from 1 to 4 hours, depending on the study options selected.

IMPLEMENTATION PROCEDURES

The module is completely self-instructional and requires no external assistance for use. Users may choose to view the audiovisual materials in 1 hour in an individual or group mode. They may choose to read the manual individually or hold a group workshop for a morning in which they view the audiovisual material and discuss questions raised in the manual regarding the implications and adaption of the ideas presented.

Summary Cost Information

If, for example, a district wanted to orient five of its top-level administrators to project management, they might choose to hold a workshop using the filmstrips and accompanying tapes. Their cost would be $20 for the audiovisual materials and $25 for the manuals (one for each participant) for a total of $45.

Personnel Required for Product Adoption and Implementation

The product can be used by a school superintendent or group of top-level administrators without any previous training in project management. Districts can choose, however, to obtain consultation or assistance from the developer for the orientation or followup activities. Costs for different services can be obtained from the developer.

ASSURANCES AND CLAIMS

Assurances

The subject of the product is suggested rational management procedures for consideration by top-level administration. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

Steps have been taken to assure that the product excludes social bias. During the pilot and field testing of the product, school district personnel brought incidences of bias to the attention of the developers. As a result, changes were made to both the audiovisual and written materials.

The product has been used by school districts of various sizes in different regions of the United States with comparable results in terms of users understanding the concept of project management, its benefits for school districts, and their role in supporting project efforts. Some used the product without the assistance of the developer. They achieved the same positive results.

Claims

The product orients top-level school administrators to the project-management process, the benefits of project management for a local school district, and the various support activities that top-level admininstrators ought to perform in order to help assure project success. This claim is supported by a summative evaluation conducted during 1973 involving several school districts.

Particular attention has been given to the quality of the product's content and instructional process. Product development involved the steps of analysis, conceptualization, design, construction of prototype, pilot testing and revision, field testing and revision, and summative evaluation. The steps of analysis, conceptualization, and design involved a task analysis of project management in schools, a review of literature on project management and instructional systems design, and consultation with experts in project-management and instructional-systems design. The construction of the prototype involved the developer and an external project-management expert in the writing of lesson material. The pilot testing, field testing, summative evaluation, and revisions of the product involved top-level administrators from districts in several States and many other knowledgeable educators. This developmental process has been carefully documented.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Manual	1 per student	5.00	Reusable	
12 filmstrips and tapes (optional)	1 set per class	20.00	Reusable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The development of *Project Management Executive Orientation* is complete, except for final packaging changes, and is available from the developer. The written manual portion of the product will be available in a compact, final package by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF FEBRUARY 1975 ■

RD 140 026

PROPOSAL DEVELOPMENT

An individualized package to train school administrators and teachers in the techniques of obtaining approval and financial support for educational activities

Proposal Development is a training product that instructs school administrators and teachers in the techniques and skills of managing the development of proposals for educational projects. It helps school personnel to plan specific school improvements and to present those plans to decisionmakers for approval and support. The decisionmaker might be a school board or an external funding agency. The emphasis is on proposals to undertake specific educational activities rather than proposals to perform academic research.

The training product covers the topics of planning the development of a proposal; preparing to conduct the proposal development effort; creating the proposal document; and submitting, amending, and negotiating the proposal.

The product consists of nine individually bound lesson booklets and a user's manual, all packaged in a single, book-size box that permits easy handling and storage. The lesson booklets include user management instructions, instructional objectives, text, examples, exercises, reading references, and self-assessment instruments. The materials can be used in an individual or a group setting.

SUBJECT AREA(S)

Planning and administration.

The product emphasizes the development of user knowledge and skills required to effectively manage the development of a proposal for an educational activity. These skills allow the user to perform such tasks as: (1) Developing the plan for proposal development including work breakdown structure, work flow diagram, time estimates, and a budget; (2) preparing for the startup of the proposal development effort; (3) conducting the proposal development effort including the creation of a detailed proposal document; and (4) submitting, amending, and negotiating the proposal.

INTENDED USERS AND BENEFICIARIES

The training product is intended primarily for use by any person in a school district given the responsibility of preparing a proposal document. It is also helpful to others participating in a proposal development effort.

Potential users of the product include school administrators, teachers, graduate educators, community agency personnel interacting with schools, and agencies having liaison with local schools (e.g., State departments of education).

GOAL(S) OR PURPOSE(S)

The goal of the product is to help school districts develop detailed, effective proposals/plans for their new educational activities. This is accomplished by providing users with the knowledge and skills necessary to plan, prepare, operate, and terminate a proposal development effort/project.

PATTERNS OF USE

The material is self-contained and requires no specially trained individual for use. Lessons cover the lifespan of a proposal development project and usually are studied sequentially. The material is flexible and can, for example, be adapted to emphasize proposal management skills or proposal writing and preparation skills. Consequently, users may choose to obtain consultation or assistance from the developer.

ASSESSMENT PROVISIONS

The product includes pretests for assessing entry-level skills and posttests for user self-assessment of performance.

TIME REQUIREMENTS

The product takes 10 to 12 hours to complete. This time may be spread out over the duration of the proposal development project.

IMPLEMENTATION PROCEDURES

No specially trained individuals are required for a district to use the product. It is recommended, however, that one person coordinate the training of other staff members. Each user should have a copy of the product in order to facilitate initial training and later reference during the proposal development effort.

Summary Cost Information

If, for example, a district chose to train one proposal development project director and five other staff members helping in the development of the proposals, then six sets of materials would be needed for a total cost of $150.

Personnel Required for Product Adoption and Implementation

The product can be used by an individual or group of district staff without previous training in proposal development. Districts may choose, however, to obtain consultation or assistance from the developer for initial staff training or adaptation of the materials to special needs. Costs for different services can be obtained from the developer.

ASSURANCES AND CLAIMS

The subject of the product is rational management and planning procedures for use by school district administrators and teachers. This emphasis minimizes the chance of harm resulting from use. The developer has not received any reports of harm associated with the use of the product.

The nature of the content of the product tends to minimize the chance of social bias. Although the developer has strived for social fairness in writing the material, no formal analysis of wording or examples has been conducted.

The product has been used by personnel from large- and medium-size urban school districts and smaller suburban districts in different regions of the United States with comparable results in terms of user performance.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Lesson booklets and user's manual	1 set per user	25.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The development of the product is complete and available from the developer:
Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 027

RURAL FUTURES DEVELOPMENT STRATEGY DESCRIPTIONS

Four types of descriptions of strategy to help people in rural communities regain self-determination and local control

Rural Futures Development Strategy Descriptions forms one part of a comprehensive approach to the improvement of rural education. The descriptions are tools to help people understand and effectively communicate about the RFD Strategy.

The four types of RFD Strategy Descriptions focus on different aspects of the model itself, as follows:

(1) Diagrams—Overview diagrams and matrices show the relationships among Rural Futures Development (RFD) participants, problem-solving phases, products, and facilitating activities.

(2) Brochure—The brochure contains information about the model and its key elements, likely outcomes, participant roles, RFD products, and technical assistance capabilities of the Northwest Regional Educational Laboratory (NWREL).

(3) Flip charts and transparencies—These visual aids describe the model sequentially from its funding, development, and installation to its outcomes.

(4) Technical paper series—Each paper addresses one important feature of the RFD Strategy, its theoretical base and data supporting its reliability and validity.

Three problem areas, evidenced in the literature of rural sociology, are addressed by the model:

(1) Rural communities have lost the structures and processes that used to make them centers of self-determination and local control. They have been penetrated by agencies whose policies and operating procedures are determined outside the local community. To reverse this trend, people in rural communities need to develop their skills in inquiry, problem solving, and effective collaboration.

(2) One reason rural schools are less responsive and less adaptive to change is that teachers and administrators often are alienated from community life; they also have few opportunities for professional growth. School boards rarely have access to multiple strata of opinion within the community and school. There is a need to form close working relationships among educators, students, and citizens.

(3) The services which support agencies provide to rural schools tend to be inadequate and overly prescriptive. Teacher training institutions have not considered special rural needs and circumstances in designing programs. Assistance needs to be provided to these agencies to help them better meet rural needs.

The RFD Strategy has five key elements which are firmly based in the research and theories of change, organizational development, and learning. These elements are: (1) An external change agent, (2) a collaborative problem-solving process, (3) self-directed learning based on self-perceived needs, (4) the institutionalization of educational innovation, and (5) the self-renewal of educational organizations.

SUBJECT AREA(S)

Rural education improvement

INTENDED USERS AND BENEFICIARIES

(1) Diagrams serve as: Reference aids for RFD developers, consultants, installers, and participants to employ when developing products and materials for use with the RFD Strategy; reference materials and visual aids for RFD developers, consultants, installers, and participants to use when developing oral or written presentations that explain the RFD Strategy; training aids for process facilitators and the trainers of process facilitators; and descriptive materials that can be distributed to a general audience interested in finding out about the RFD Strategy.

(2) The brochure is intended to create interest in, and encourage further investigation of, the RFD Strategy when used by RFD developers, consultants, installers, trainers of process facilitators, School-Community Group (SCG) members, RFD participants, and others interested in the RFD Strategy.

(3) Flip charts and transparencies are intended to present progressive, unfolding description of the RFD Strategy that complements oral presentations and are

intended for use by: RFD consultants; installers; trainers of process facilitators; process facilitators; State, regional, and local education agency personnel; and others interested in or participating in the RFD Strategy.

(4) The technical paper series is intended for professional audiences such as educators, funding agencies, and researchers who need academically acceptable descriptions of the RFD Strategy, its theoretical foundations, and its impact.

GOAL(S) OR PURPOSE(S)

The two purposes of the product are: (1) To provide basic descriptions of, and information about, the RFD Strategy in forms suitable for use with a variety of audiences and in a variety of situations and (2) to serve as guidelines for educational agencies as they develop materials describing the RFD Strategy and explaining the treatment that other RFD products and procedures are meant to support.

PATTERNS OF USE

Two product pieces, the flip charts and diagrams, are designed to complement a verbal presentation. The brochure and technical papers are self-explanatory and have no prescribed pattern of use.

ASSESSMENT PROVISIONS

There is no formal evaluation of audiences who use this product, although formative data intended to improve the product are collected. The effectiveness of the product is measured in terms of the number and kinds of formal agreements between various audiences resulting from the product's use, as well as the public support that is generated for these agreements.

TIME REQUIREMENTS

Time completion varies with the audience, the product piece, and the context of use; for example, the brochure can be read thoroughly by the average reader in 5-10 minutes, while scholarly analysis of one technical paper might require several days.

IMPLEMENTATION PROCEDURES

No special equipment, services, or organizational changes are required for most product uses. Persons from State or regional education agencies who use the product have received consultation or training from the product developer in order to acquire a thorough knowledge of the model.

ASSURANCES AND CLAIMS

This product has been used (in its current and earlier forms) with a wide variety of audiences, lay and professional, in large- and small-group activities. No evidence of harm has been observed or indicated by users.

The product is consciously designed to be free of racial, ethnic, socioeconomic, or sexual stereotyping. In addition, the product will be subjected to rigorous internal quality assurance procedures and to expert and user review through which any questionable portion of the product can be identified and corrected.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Brochure	1 master per agency plus copies as needed	Not yet determined	Consumable yearly	
Diagrams	1 master set per agency plus copies as needed	Not yet determined	Consumable yearly	
Flip charts	1 master set per agency	Not yet determined	Reusable	
Technical paper series	1 master set per agency plus copies as needed	Not yet determined	Consumable yearly	

DEVELOPER/AUTHOR:

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Portland, Oreg. 97204

Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for all product pieces have been approved. Preliminary versions of all product pieces except the flip charts are available from the developer:

Northwest Regional Educational Laboratory
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710 SW. Second Ave.
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INFORMATION CURRENT AS OF MARCH 1975 ■

RURAL FUTURES DEVELOPMENT GUIDE FOR SUPPORT AGENCIES

RD 140 028

A guide for regional or State educational staff providing support for educational change in a rural setting

The *Rural Futures Development (RFD) Guide for Support Agencies* provides basic information, guidelines, and resources for staff persons whose agencies at the State or regional level support educational problem solving in rural communities as part of the RFD Strategy. (See RFD Strategy Descriptions catalog entry for a more detailed explanation of this problem-solving model.) Although these agencies are usually planned to be the State and regional educational agencies, other related organizations such as community colleges or universities might be designated as the support agencies.

The primary purpose of the product is to guide the work of support agency staff related to RFD in: fostering and maintaining collaborative relationships between local, regional, and State educational agencies; providing training to the external change agents who are based in regional agencies and who facilitate local problem solving (see also the catalog entry for the RFD *Guide for Training School-Community PF's*); providing consultative services in a responsive rather than directive manner to participating groups in the RFD Strategy—the local school-community problem-solving group, school boards, school staffs, and school administrators; and building a data-collection system on which decisions to expand the use of the RFD model throughout a region or the entire State can be based.

The product, therefore, contains a model for consultation that will facilitate multilevel collaboration, the theory and rationale which supports this model, sample activities, and a set of procedures and resources for adapting this model to a variety of audiences and sites.

SUBJECT AREA(S)

How to support and plan for the expansion of collaborative problem solving in local schools and communities is the subject of the *RFD Guide for Support Agencies*. The guide consists of:

RFD Strategy values, assumptions, goals, and features.

A discussion of the leadership and support roles of agencies involved in RFD.

A problem-solving approach to the development of individual and organizational capabilities related to RFD.

INTENDED USERS AND BENEFICIARIES

The primary users of the product are support agency staff, at both the State and regional levels, who coordinate and manage the implementation of RFD, provide services in response to local requests, and plan for the expansion of RFD throughout the region and State.

Ultimate beneficiaries of the product are the groups of people in rural communities with whom process facilitators (PF's) work to solve educational problems, communities at large which strengthen their local problem-solving capabilities, and rural students who find increased educational opportunities available as a result of these local capabilities.

GOAL(S) OR PURPOSE(S)

The goals of the support agency guide are: (1) to provide a method of examining and deciding on agency functions in supporting the local problem-solving process; (2) to provide help in developing the means, whether tools or skills, to fulfill these functions; (3) to provide guidelines for carrying out these functions; and (4) to provide assistance in adapting the RFD problem-solving approach to other school and community concerns.

PATTERNS OF USE

Support agency staff are introduced to the use of the product by NWREL consultants. The staff uses the guide as both a handbook and a resource, with assistance from NWREL consultants that decreases as individual and organizational capabilities related to RFD increase.

Both format and content of the product are flexible and are intended to be influenced by specific situations encountered by staff. Content is focused on supporting and adapting the local problem-solving process. The product is generally self-directive and self-pacing, except that its use coincides at several points with local events.

ASSESSMENT PROVISIONS

The support agency guide is not tested, except in an exploratory fashion, apart from the context of the RFD Strategy. Learning of State and regional educational agency staffs, based on the assistance given by NWREL consultants and use of the RFD support agency guide, is to be assessed as part of evaluating the total RFD Strategy in the second of two consecutive sites. Evaluation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the Strategy; the product is not ready to be included as part of this first installation. Evaluation of the second installation will ascertain the degree to which two kinds of objectives are achieved: Process objectives are concerned with the degree to which the strategy is the implemented; and outcome objectives deal with the extent to which desired effects are achieved, enroute, and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives related to both the State and regional educational agencies and their roles. All instrumentation, data collection, analysis of data, and presentation of results are the responsibility of the Research and Evaluation Unit, Rural Education Program.

TIME REQUIREMENTS

Although support agency activities are closely tied to local problem solving activities, in most cases they begin before, and extent beyond local events. Preceding local activities, support agency activities include: Becoming aware of the RFD model, making a joint local-regional-State decision to utilize the model, negotiating contracts with NWREL for its consultation services between the school district and the regional agency for PF team services, forming task forces at the State and regional levels, and beginning to examine task force functions and to plan their roles.

The time required to complete one problem-solving cycle in a local community ranges from one to two school years, depending on the scope of the addressed problem and on the tradeoffs each community makes in terms of thoroughness, investment of time and resources, and similar factors.

At the end of this time period, the support agencies prepare a summative evaluation of the use of the RFD model, decide whether to expand use of the model and carry out the expansion effort.

IMPLEMENTATION PROCEDURES

Use of the product by support agency staff is introduced by NWREL consultants and is most effective in concert with continued consultative services. No special equipment or facilities are required.

The product consists of one notebook and a container of resources. These are infinitely expandable by support agency staff and can be tailored to individual needs and workstyles.

Personnel Required for Product Adoption and Implementation

No personnel in addition to those from support agencies who implement the RFD Strategy at the local, regional, and State level, are required. Major strategy implementation roles at the various levels are: Local—process facilitator (PF) team; regional—RFD coordinator and RFD task force; and State - RFD coordinator, RFD task force, and RFD specialists (training of PF's and liaison with regional agency).

PF's are anticipated to be the only staff members who may be recruited from outside the regional support agency if existing staff members are not identified for that role. Other roles are expected to be designated to existing personnel. Also, the PF's may work full time with the problem-solving process, whereas other roles are expected to be less than full time.

ASSURANCES AND CLAIMS

Portions of this product have been used in earlier forms with a wide variety of audiences. No evidence of harm has been observed or indicated by users. Formative data have been gathered consistently from these users to improve the usefulness of the product pieces.

The product will be consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic or sexual stereotyping, and of patronizing or demeaning attitudes. In addition, the product will be subjected to rigorous internal quality assurance procedures and to expert and user reviews through which any questionable portion of the product can be identified and corrected.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Looseleaf notebook	1 per support agency (minimum, to be determined)	Not determined	Reusable	
Container of resources	1 per support agency	Not determined	Reusable	

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. 2d Ave.
Portland, Oreg. 97204

Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications will be prepared and approved by November 30, 1975. Access to the product plans can be obtained through the developer.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 029

RURAL FUTURES DEVELOPMENT GUIDE FOR SCHOOL BOARDS

A handbook for school-board-member participation in educational problem solving in a rural community

The *Rural Futures Development Guide for School Boards* is a handbook for school board members who participate in educational problem solving in rural communities as part of the Rural Futures Development (RFD) Strategy. (See RFD Strategy Descriptions catalog entry for a more detailed explanation of this problem-solving model.)

The primary purpose of the guide for school boards is to aid the work of the school board in the problem-solving process. This work has three aspects: (1) The participation of the school board in community-school problem solving as the legitimate local authority to contract for process facilitator services, and to officially adopt new educational policy and practice; (2) the leadership of the school board in encouraging and supporting the work of the community members, educators, and students on the school-community group (SCG), a "third party" problem-solving body; and (3) the development over time of the school board's own problem-solving capabilities related to its professional concerns.

The product, therefore, contains basic information, guidelines, and resources related to each of these aspects.

SUBJECT AREA(S)

Problem solving from the perspective of the school board for educational improvement, and for personal and professional development is the subject area.

The major topics covered by the guide are: (1) RFD Strategy values, assumptions, goals, and features; (2) the role of the school board in using the problem-solving model and the relationships between the various groups of people involved; (3) guidelines for participation, including group task (receiving and acting on reports from the school-community group, or arranging resources for improvement projects; and group debriefing and planning) and group interaction (interpersonal communication, conflict resolution, and decisionmaking); and (4) leadership and management while engaged in problem solving.

INTENDED USERS AND BENEFICIARIES

The primary users of this product are school board members who are legally responsible for the education of children in their district. In addition, school administrators, such as the superintendent or others who have a direct relationship to the school board, may also find the product of interest and use.

Ultimately the entire community and the school will benefit from the product's use because increased educational opportunities follow the strengthening of local problem-solving capabilities. This in turn results from a collaborative problem-solving experience.

GOAL(S) OR PURPOSE(S)

The school board guide is intended to provide board members with: (1) Indepth information about the RFD Strategy; (2) guidelines for participating in every phase of the problem-solving process; (3) a description of the kinds of activities the school board can expect to be involved in; (4) guidelines for encouraging and supporting the participation of the SCG and the school staff in problem-solving activities; and (5) a series of resources, along with some suggestions for developing a storage and retrieval system for them.

PATTERNS OF USE

School board members are introduced to the use of the product by the team of external change agents, namely process facilitators (PF's), who facilitate educational problem solving as part of the RFD Strategy. The school board uses the guide both as a handbook and a resource, with consultation from the PF team as requested.

Both format and content of the product are flexible. Content is focused entirely on the process of problem solving as applied to specific concerns encountered in the school and community. The product is generally self-directive, and either self-pacing or paced by the progress of the SCG and school staff.

ASSESSMENT PROVISIONS

The *Rural Futures Development Guide for School Boards* is not tested, except in an exploratory fashion, apart from the context of the RFD strategy. School board development, based on the consultation advice of the PF's and the use of the product, will be assessed as part of evaluating the total RFD Strategy in two consecutive sites. Evaluation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the strategy. Evaluation of the second installation will ascertain the degree to which two kinds of objectives are achieved. Process objectives are concerned with the degree to which the strategy is implemented and outcome objectives deal with the extent to which desired effects are achieved en route and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives relating to the school

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board and its role. These instruments will include logs, observation schedules, interview schedules, questionnaires, rating scales, checklists, knowledge tests, work sample reviews, and record reviews. All instrumentation, data collection, analysis of data, and presentation of results are the responsibility of the research and evaluation unit, rural education program.

TIME REQUIREMENTS

The time required to complete one problem-solving cycle in a local community ranges from 1 to 2 school years, depending on the scope of the addressed problem and on the tradeoffs each community makes in thoroughness, investment of time and resources, and similar factors. Therefore, one cycle of use of the product by the school board also takes from 1 to 2 school years.

IMPLEMENTATION PROCEDURES

A PF team from a regional education agency or other support agency is required to consult with the school board throughout the first cycle of problem solving as needed. Thereafter, the PF team can be utilized as an occasional consultant. No special equipment or facilities are required.

The product has two parts: A looseleaf notebook and a file box containing resources. Both parts are infinitely expandable by the school board and can be tailored to individual and group needs over time.

Personnel Required for Product Adoption and Implementation

Use of the product assumes that a PF team is available for consultation with the school board. All roles are assumed by local residents in addition to their normal activities.

ASSURANCES AND CLAIMS

A few materials in this product have been used in earlier forms by hundreds of community and school groups, with no evidence of harm observed or indicated. A few additional materials have been validated by a user panel. Formative data have been gathered consistently from these users to improve the usefulness of the materials. The remaining pieces of the product have not as yet been tested.

The product is consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic, or sexual stereotyping and patronizing or demeaning attitudes. In addition, the product will be subjected to rigorous internal quality assurance procedures and to expert and user review by which any questionable portion of the product can be identified and corrected.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Looseleaf notebook	1 per school board member	Not yet determined	Reusable	
Box of resources	1 per school board	Not yet determined	Reusable	

DEVELOPER/AUTHOR:

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710 SW. 2d Ave.
Portland, Oreg. 97204

Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for the product have been approved, and a number of its sections are available in a preliminary version. The completed guide will have been produced, tested, revised, and prepared in prototype form by November 30, 1975. Access to the product can be obtained through the developer:

Northwest Regional Educational Laboratory
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710 SW. 2d Ave.
Portland, Oreg. 97204

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 030

RURAL FUTURES DEVELOPMENT GUIDE FOR SCHOOLS

A handbook for community groups participating in planning and implementing educational improvements in a rural community

The *Rural Futures Development Guide for Schools* is a handbook for school staff members who participate in educational problem solving in rural communities, as part of the Rural Futures Development (RFD) Strategy. (See RFD Strategy Descriptions catalog entry for a more detailed explanation of this problem-solving model.)

The primary purpose of the guide for schools is to support the work of the school staff in the problem-solving process. This work has four aspects: (1) The participation of school staff members in the school-community group, (SCG), a "third party" problem-solving group comprised also of community opinion leaders, students, and, on occasion, school board members; (2) the provision of valuable data about the art and science of education to which school staff members have access based on their experience and learning, (3) the leadership of school administrators who encourage and support the work of the SCG and others on the school staff; and (4) the advance preparation that school staff members must do in order to absorb constructively the impact of various educational improvements.

The product contains basic information, guidelines, and resources related to each of these aspects.

SUBJECT AREA(S)

The subject area is problem solving from the perspective of the school staff for the improvement of education and for personal and professional development.

Major topics of the product include: (1) RFD Strategy values, assumptions, goals, and features; (2) the role of the school in using the problem-solving model and the relationships between various groups of people involved; (3) guidelines for participation, including group task (analysis of alternatives along the dimensions of organizational development, curriculum development, and staff development, and group debriefing and planning) and group interaction (interpersonal communication, conflict resolution, and decisionmaking); and (4) leadership management while engaged in problem solving.

INTENDED USERS AND BENEFICIARIES

The primary users of this product are professional members of the school staff who are legally and/or traditionally responsible for decisionmaking in the schools with respect to programs, facilities, resources, organizational structure, and other activities. In addition, school support staff such as clerks, custodians, and students will use the guide as they participate in the RFD Strategy.

Ultimately the entire community and school will benefit from the product's use because increased educational opportunities follow the strengthening of local problem-solving capabilities. This in turn results from a collaborative problem-solving experience.

GOAL(S) OR PURPOSE(S)

The school guide is intended to provide school staff members with: (1) Indepth information about the RFD Strategy, (2) guidelines for participating in every phase of the problem-solving process, (3) a description of the kinds of activities in which the school staff can expect to be involved, and (4) a series of resources, along with some suggestions for developing a storage and retrieval system for them.

PATTERNS OF USE

School staff members are introduced to the use of the product by a team of external change agents, namely process facilitators (PF's), who facilitate educational problem solving as part of the RFD Strategy. The staff uses the guide both as a handbook and resource, with support from the PF team. The PF team support is designed to decrease over time as staff confidence and skill increase.

Both format and content of the product are flexible. Content is focused entirely on the process of problem solving as applied to specific concerns encountered in the school and community. The product is generally self-directive, and either self-pacing or paced by the progress of other problem-solving groups.

ASSESSMENT PROVISIONS

The *Rural Futures Development Guide for Schools* has not been tested, except in an exploratory fashion, apart from the context of the RFD Strategy. The learning of school staff members, based on consultation advice given by PF's and the use of the product, is to be assessed as part of evaluating the total RFD Strategy in two consecutive sites. Evaluation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the strategy. Evaluation of the second installation will ascertain the degree to which two kinds of objectives are achieved: process objectives are concerned with the degree to which the strategy is implemented and outcome objectives deal with the extent to which desired effects are achieved en route and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives relating to school staff members and their role. These instruments will include logs, observation schedules, interview schedules, questionnaires, rating scales, checklists, knowledge tests, work sample reviews, and record reviews. All instrumentation, data collection, analysis of data, and presentation of results are the responsibility of the research and evaluation unit, rural education program.

TIME REQUIREMENTS

The time required to complete one problem-solving cycle in a local community ranges from 1 to 2 school years, depending on the scope of the addressed problem and on the tradeoffs each community makes in thoroughness, investment of time and resources, and similar factors. Therefore, one cycle of use of the product by the school staff also takes from 1 to 2 school years.

IMPLEMENTATION PROCEDURES

A PF team from a regional education agency or other support agency is required to assist the school staff through the first cycle of problem solving. Thereafter, the PF team can be utilized as an occasional consultant. No special equipment or facilities are required.

The product has two parts: A looseleaf notebook and a file box containing resources. Both parts are infinitely expandable by the school staff and can be tailored to individual and group needs over time.

Personnel Required for Product Adoption and Implementation

Use of the product assumes that a PF team is available for consultation with the school staff and school administrators, and that release time for school staff and students can be arranged for meetings, workshops, or other problem-solving activities.

All roles are designated for existing personnel.

ASSURANCES AND CLAIMS

Materials in this product have been used in earlier forms by hundreds of community and school groups, with no evidence of harm observed or indicated. Formative data have been gathered consistently from these users in order to improve the usefulness of the materials.

The product is consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic, or sexual stereotyping, and patronizing or demeaning attitudes. In addition, the guide will be subjected to rigorous internal quality assurance procedures and to expert and user review by which any questionable portion of the product can be identified and corrected.

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MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Looseleaf notebook	3 per school	Not yet determined	Reusable	
Box of resources	1 per school	Not yet determined	Reusable	

DEVELOPER/AUTHOR:

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Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for the product have been approved, and a number of its sections are available in a preliminary version. The completed guide will have been produced, tested, revised, and prepared in prototype form by November 30, 1975. Access to the product can be obtained through the developer:

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 031

RURAL FUTURES DEVELOPMENT NOTEBOOK FOR SCHOOL-COMMUNITY GROUPS

A handbook for those who work in educational problem solving in rural communitites

The *Rural Futures Development Notebook for School-Community Groups* is a handbook for school-community groups, representative groups of community opinion leaders, educators, and students who collaborate in educational problem solving in rural communities as part of the Rural Futures Development (RFD) Strategy. (See RFD Strategy Descriptions catalog entry for a more detailed explanation of this problem-solving model.)

The primary purpose of the RFD notebook is to support the work of the school-community group (SCG) in planning and carrying out educational improvements within their school system. The RFD problem-solving process is cyclical, but can be viewed as having seven phases:

(1) Awareness—Schools and communities learn about RFD and decide whether they are ready to undertake collaborative problem solving and whether RFD is appropriate to their needs.

(2) Getting started—A temporary SCG is formed to investigate which opinion groups in the community and school ought to be represented on the permanent SCG and which opinion leaders should represent those groups.

(3) Focusing on the problem—The permanent SCG is established. It conducts a community and schoolwide survey to identify educational needs, orders the needs, and selects one or more for the first cycle of problem solving. The SCG then prepares goal and barrier statements for each selected problem.

(4) Searching for alternatives—The SCG is concerned now with gathering information about alternative solutions to perceived needs, identifying local and outside resources and preparing reports which describe choices, predicted consequences of each choice, and a preferred solution.

(5) Planning for action—The SCG prepares detailed implementation and evaluation plans for each improvement project; this involves further analysis of the consequences of the solution and detailed plans for attending to curriculum, organizational, and staff competency requirements attendant to the solution. Resources are planned in consultation with the school board; activities are planned with the school staff.

(6) Carrying out the plans—The SCG and school staff work together to introduce the improvement, monitor its progress, modify plans to meet changing realities, and so forth; progress reports are provided to the school board and the community at large.

(7) Assessing the results—The SCG evaluates the results of the educational improvement, as well as the results of using RFD, and reports to the community and the school board. The SCG also recommends whether to use RFD in another problem-solving cycle, which problems to address next, and any changes in SCG membership that seem appropriate.

The product contains basic information, guidelines, and resources for the SCG, related to each of these phases.

SUBJECT AREA(S)

The subject area is problem solving from the perspective of the SCG for educational improvement in collaboration with students and educators and for personal and professional development.

Major topics of the product include: (1) RFD Strategy values, assumptions, goals, and features; (2) the role of the SCG in using the problem-solving model and the relationships among various groups of people involved; (3) guidelines for participation, including group task (conducting a needs assessment, examining alternatives, using resources and assessing results; and group debriefing and planning) and group interaction (interpersonal communication, conflict resolution, and decisionmaking); and (4) leadership and management while engaged in problem solving.

INTENDED USERS AND BENEFICIARIES

The primary users of this product are the SCG chairperson, the SCG working in toto or in smaller task force teams, and individual SCG members.

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Ultimately the entire community and school benefit from the product's use because increased educational opportunities follow the strengthening of local problem-solving capabilities. This in turn results from a collaborative problem-solving experience.

GOAL(S) OR PURPOSE(S)

The RFD notebook is intended to provide SCG members with: (1) Indepth information about the RFD Strategy, (2) guidelines for participating in every phase of the problem-solving process, (3) a description of the kinds of activities in which the school staff can expect to be involved, and (4) a series of resources along with some suggestions for developing a storage and retrieval system for them.

PATTERNS OF USE

SCG members are introduced to the use of the product by the team of external change agents, namely process facilitators (PF's), who facilitate educational problem solving as part of the RFD Strategy. The SCG uses the guide, both as a handbook and resource, with support from the PF team that decreases over time—as the confidence and skill of SCG members increase.

Both format and content of the product are flexible. Content is focused entirely on the process of problem solving as applied to specific concerns encountered in the school and community. The product is generally self-directive and self-pacing.

ASSESSMENT PROVISIONS

The RFD notebook is not tested, except in an exploratory fashion, apart from the context of the RFD strategy. The learning of SCG members, based on the consultation advice by PF's and the use of the product, is to be assessed as part of evaluating the total RFD Strategy in two consecutive sites. Evaluation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the strategy. Evaluation of the second installation will ascertain the degree to which two kinds of objectives are achieved. Process objectives are concerned with the degree to which the strategy is implemented and outcome objectives deal with the extent to which desired effects are achieved en route and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives related to SCG members and their role. These instruments will include logs, observation schedules, interview schedules, questionnaires, rating scales, checklists, knowledge tests, work sample reviews, and record reviews. All instrumentation, data collection, analyses of data, and presentation of results are the responsibility of the research and evaluation unit, rural education program.

TIME REQUIREMENTS

The time required to complete one problem-solving cycle in a local community ranges from 1 to 2 school years, depending on the scope of the addressed problem and on the tradeoffs each community makes in terms of thoroughness, investment of time and resources, and similar factors. Therefore, one cycle of use of the product by the SCG also takes from 1 to 2 school years.

IMPLEMENTATION PROCEDURES

A PF team from a regional education agency or other support agency is required to assist the SCG through the first cycle of problem solving. Thereafter, the PF team can be utilized as an occasional consultant. No special equipment or facilities are required.

The product has two parts: A looseleaf notebook and a file box containing resources. Both parts are infinitely expandable by the SCG and can be tailored to group needs over time.

Personnel Required for Product Adoption and Implementation

Use of the product assumes that a PF team is available for consultation with the SCG and that release time for school staff and students can be arranged for meetings, workshops, or other problem-solving activities of the SCG, as required.

All roles are assumed by local residents in addition to their normal activities.

ASSURANCES AND CLAIMS

Materials in this product have been used in earlier forms by hundreds of community and school groups, with no evidence of harm observed or indicated. Formative data have been gathered consistently from these consumers to improve the usefulness of the materials.

The product is consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic, or sexual stereotyping, and patronizing or demeaning attitudes. In addition, the product will be subjected to rigorous internal quality assurance procedures and to expert and user review through which any questionable portion of the product can be identified and corrected.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Looseleaf notebook	2 per SCG*	Not yet determined	Reusable	
Box of resources	1 per SCG	Not yet determined	Reusable	

*School-community group

DEVELOPER/AUTHOR:

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Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for the product have been approved, and a number of its sections are available in a preliminary version. The complete guide will have been produced, tested, revised, and prepared in prototype form by November 30, 1975. Access to the product can be obtained through the developer:

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 032

RURAL FUTURES DEVELOPMENT GUIDE FOR TRAINING SCHOOL-COMMUNITY PROCESS FACILITATORS

A guide for the trainers of external change agents who are to facilitate educational improvement in a rural community

The *Rural Futures Development Guide for Training* provides information, guidelines, and sample training activities for trainers of the external change agents (process facilitators or PF's) who facilitate educational problem solving in rural communities as part of the Rural Futures Development (RFD) Strategy. (See RFD Strategy Descriptions catalog entry for a more detailed explanation of this problem-solving model.)

The primary purpose of the product is to aid trainers, called RFD specialists, in developing a series of formal training sessions interspersed with guided field experiences (field apprenticeship) that will prepare and assist teams of PF's in carrying out the problem-solving process. PF's work with three major groups in each community: (1) The school-community group (SCG), a "third party" problem-solving group composed of community opinion leaders, school staff members, students, and on occasion, school board members; (2) the school staff, who provide valuable technical data to the SCG at each step in the problem-solving process and who also prepare for the impact of various problem solutions; and (3) the school board and school leaders who encourage and support the work of the SCG and the school staff in part by increasing their own problem-solving capabilities over time.

The RFD Training Guide is designed to be used in close association with the *RFD Manual for School-Community Process Facilitators* (see this catalog entry also).

SUBJECT AREA(S)

Planning of process consultation for persons engaged in collaborative problem solving is the subject area.

INTENDED USERS AND BENEFICIARIES

The primary users of the product are the RFD specialists. Both RFD specialists and PF's use training activities in preparation for field experiences. Ultimate beneficiaries of the product are the groups of people in rural communities with whom PF's work to solve educational problems, communities at large which strengthen their local problem-solving capabilities, and rural students who find increased educational opportunities available as a result of these local capabilities.

GOAL(S) OR PURPOSE(S)

The two goals of the training guide are to provide flexible and responsive training for PF's and to prepare PF's to carry out the events of the RFD problem-solving process with SCG's, school staffs, administrators, and school boards.

PATTERNS OF USE

RFD specialists and PRF's consult the training guide as a regular part of their preparation for training sessions. Sample activities, which provide a number of different approaches, are chosen and perhaps modified for use in training sessions. By simulation and role playing, PF's prepare for the kinds of behavior they will need in their field work. Specialists are encouraged to add to the supply of sample activities, as well as to adapt both the activities and the guidelines in the guide to specific situations encountered where they and PF's are working.

ASSESSMENT PROVISIONS

The training guide is not tested, except in an exploratory fashion, apart from the context of the RFD strategy. RFD specialist learning, based on the assistance given by NWREL staff trainers and use of the RFD Training Guide, is to be assessed as part of evaluating the total RFD strategy in two consecutive sites. Evalation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the strategy. From the second installation will be ascertained the degree to which two kinds of objectives are achieved: Process objectives are concerned with the degree to which the strategy is implemented and outcome objectives deal with the extent to which desired effects are achieved en route and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives related to RFD specialists and their role. These instruments will include logs, observation schedules, interview schedules, questionnaires, rating scales, checklists, knowledge tests, work sample reviews, and record reviews. All instrumentation, data collection, analyses of data, and presentation of results are the responsibility of the research and evaluation unit, rural education program.

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TIME REQUIREMENTS

Training is geared to the field tasks of PF's and is planned in advance of anticipated tasks, allowing PF's to practice behaviors needed to accomplish tasks.

The time required to complete one problem-solving cycle in a local community ranges from 1 to 2 school years, depending on the scope of the addressed problem, and on the tradeoffs each community makes in thoroughness, investment of time and resources, and similar factors. Therefore, one cycle of training and apprenticeship and use of the product by the RFD specialist takes from 1 to 2 school years.

IMPLEMENTATION PROCEDURES

RFD specialists are selected from State education agencies that continue to provide a base of support for the trainers as long as the RFD strategy is used. The product is most effective for RFD specialists when used in concert with their own training. No special equipment or facilities are required.

The product consists of two notebooks—one containing the guide, the other containing the sample activities. These are infinitely expandable by RFD specialists and can be tailored to individual needs and work styles.

Personnel Required for Product Adoption and Implementation

No personnel are required in addition to those who implement the RFD strategy at the local, regional, and State levels. Major strategy implementation roles at the various levels are: Local—process facilitator team, regional—RFD coordinator, and State—RFD coordinator (monitoring) and RFD specialists (training of PF's).

Only the PF's may work full time with the problem-solving process. Other roles are designated to existing personnel.

ASSURANCES AND CLAIMS

This product has been used (in its earlier forms) with approximately 60 potential PF trainers who had varying degrees of previous professional training. No evidence of harm has ever been observed or indicated by users. Formative data have been gathered consistently from these users to improve the usefulness of the product.

The product is consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic, or sexual stereotyping, and patronizing or demeaning attitudes. The product will be subjected to rigorous internal quality assurance procedures and to expert and user review by which any questionable portion of the product can be identified and corrected.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Guide looseleaf notebook	1 per RFD* specialist	Not yet determined	Reusable	
Activities looseleaf notebook	1 per RFD specialist	Not yet determined	Reusable	

*Rural Futures Development

DEVELOPER/AUTHOR:

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Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for the product have been approved, and a number of its sections are available in a preliminary version. The complete guide will have been produced, tested, revised, and prepared in prototype form by November 30, 1975. Access to the product can be obtained through the developer:

Northwest Regional Educational Laboratory
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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 033

RURAL FUTURES DEVELOPMENT MANUAL FOR SCHOOL-COMMUNITY PROCESS FACILITATORS

Information, guidelines, and resources for those facilitating educational problem solving in rural communities

The *Rural Futures Development Manual for School-Community Process Facilitators* provides basic information, guidelines, and resources for the teams of external change agents (process facilitators, referred to as PF's) who facilitate educational problem solving in rural communities as part of the Rural Futures Development (RFD) Strategy. (See RFD Strategy descriptions catalog entry for a more detailed explanation of this problem-solving model.)

The primary purpose of the manual is to guide the work of PF teams with major participants in the problem-solving process: (1) The school-community group (SCG) a "third party" problem-solving group composed of community opinion leaders, school staff members, students, and on occasion, school board members, (2) the school staff, who provide valuable technical data to the SCG at each step in the problem-solving process and who also prepare for the impact of various problem solutions, and (3) the school board and school leaders, who encourage and support the work of the SCG and the school staff, in part, by increasing their own problem-solving capabilities over time.

The manual contains a model for consultation, the theory and rationale which support this model, and a set of procedures and resources for helping local participants adapt this model to a variety of sites.

SUBJECT AREA(S)

Process consultation to people engaged in collaborative problem solving is the subject of the RFD manual. Two aspects of process consultation are addressed: Group interaction, for example, interpersonal communication, conflict resolution, and decisionmaking; and group task, for example, data collection and analysis, weighing alternatives, and using resources.

Major topics of the RFD manual include: (1) RFD strategy values, assumptions, goals, and features, (2) the PF role, guidelines for behavior, self-assessment and building personal skills, (3) process facilitation throughout the RFD problem-solving process, including activities such as diagnosing needs, planning meetings on the basis of data, assisting other participants to develop process skills, and tailoring activities to a specific site; and (4) use of other RFD products with the school staff, school leaders, the school board, and the school community group.

INTENDED USERS AND BENEFICIARIES

The primary users of this product are PF's, either previously or simultaneously trained in the RFD training system. For them, the RFD manual is both handbook and training resource.

Ultimate beneficiaries of the product are the groups of people in rural communities with whom PF's work to solve educational problems, communities at large which strengthen their local problem-solving capabilities, and rural students who find increased educational opportunities available as a result of these local capabilities.

GOAL(S) OR PURPOSE(S)

The RFD manual's goals are: (1) To provide PF's with a working manual and retrieval system to guide their consultation with schools and communities engaged in the RFD strategy, (2) to provide a structure for PF trainees to use in assessing their competencies and planning their training activities with an RFD trainer; (3) to help PF's maintain a productive team relationship; and (4) to build a productive relationship with their hiring agencies, where understanding and active support of the PF team may be minimal at first.

PATTERNS OF USE

Process facilitators use this product as a textbook during formal training sessions and as a handbook resource during their apprenticeship and practice. Both format and content are flexible and are intended to be influenced by specific PF needs and preferences.

Each unit of the RFD manual moves from low learner interaction—statements requiring only reading or perhaps question response—to high learner interaction—sections requiring activity design, selection of resources, and so forth, for application to a site situation in which the PF is actively involved. It is assumed that PF's participate at least once in a training program, that they progressively increase their competence, and that they have continuing access to a training consultant.

ASSESSMENT PROVISIONS

Although there is presently no instrumentation used to select PF candidates, there are general criteria established for selection that include: Comparable previous training in related subject areas, acceptability to significant portions of client population, ability to be self-sustaining in a work environment that offers minimal role support, level of intellectual and verbal competence comparable to a university graduate student, and interpersonal behavior that exhibits values consonant with RFD values.

The manual itself is not tested, except in an exploratory fashion, apart from the context of the RFD strategy. PF learning, based on formal training, guided field experiences, and use of the RFD manual, is to be assessed as part of the total evaluation of RFD strategy in two consecutive sites. Evaluation of the first installation, now underway in Utah, is concerned with providing formative data for the further definition and refinement of the strategy. From the second installation, it will be ascertained the degree to which two kinds of objectives are achieved: Process objectives, which are concerned with the degree to which the strategy is implemented, and outcome objectives, which deal with the extent to which desired effects are achieved enroute and at the conclusion of the problem-solving cycle.

A series of instruments is being developed to measure the accomplishment of objectives related to PF's and their role. These instruments will include logs, observation schedules, interview schedules, questionnaires, rating scales, checklists, knowledge tests, work sample reviews, and record reviews. All instrumentation, data collection, analysis of data, and presentation of results are the responsibility of the research and evaluation unit, rural education program.

TIME REQUIREMENTS

The time required to complete one problem-solving cycle in a local community ranges from 1 to 2 school years, depending on the scope of the addressed problem and on the tradeoffs each community makes in thoroughness, investment of time and resources, and similar factors. Therefore, one cycle of training and apprenticeship and use of the product by the PF's also takes 1 to 2 school years. (See the catalog entry for *RFD Guide for Training Process Facilitators* for more detailed information about the training schedule.) The RFD manual is an inexhaustible resource for the PF's and is designed to accompany them throughout their practice.

IMPLEMENTATION PROCEDURES

PF's are selected from or recruited by regional educational agencies, which then continue to provide a base of support for PF's as long as the RFD strategy is used. The RFD manual is most effective for PF's when used with formal training and guided field experience (comparable to student teaching). No special equipment or facilities are required.

The product has two parts—a looseleaf notebook and a file box containing resources. Both parts are infinitely expandable by PF's and can be tailored to individual needs and work style over time.

Personnel Required for Product Adoption and Implementation

No personnel in addition to those who implement the RFD strategy at the local, regional, and State levels are required. Major strategy implemention roles at the various levels are: Local—process facilitator team; regional—RFD coordinator, and State—RFD coordinator (monitoring) and RFD specialists (training of PF's).

Only the PF's may work full time with the problem-solving process. Other roles are designated for existing personnel.

ASSURANCES AND CLAIMS

This product has been used (in its current and earlier forms) with approximately 75 PF's who had varying degrees of previous professional training. No evidence of harm has ever been observed or indicated by users. Formative data have been gathered consistently from these users to improve the usefulness of the product.

The product is consciously designed, based on developer values, to be free of racial, ethnic, socioeconomic, or sexual stereotyping, and of patronizing or demeaning attitudes. In addition, the product will be subjected to rigorous internal quality assurance procedures and to expert and user review through which any questionable portion of the product can be identified and corrected.

RD 140 033

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Looseleaf manual	1 per PF*	Not determined	Reusable	Developer
Box of resources	1 per PF	Not determined	Reusable	Developer

*Process facilitator

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. 2d Ave.
Portland, Oreg. 97204

Rowan Stutz, Program Director

AVAILABILITY

Prototype specifications for the product have been approved, and a number of product sections are available in a preliminary version. The complete product will have been produced, tested, revised, and prepared in prototype form by November 30, 1975. Access to the product can be obtained through the developer.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 034

RESEARCH UTILIZING PROBLEM SOLVING (RUPS)

A training package to develop problem-solving skills of administrators and teachers

The *Research Utilizing Problem Solving* (RUPS) instructional system has two versions, one for teachers and one for administrators. The program gives teachers and administrators knowledge, skills, and techniques in retrieving and utilizing knowledge while in the process of identifying and diagnosing classroom or school problems and designing action plans to resolve them. Evaluation becomes a pattern of repeated objective diagnosis in this process. The design calls for a 5-day workshop, followed by two 3-hour meetings while engaged in a back-home application project using the RUPS process. Emphasis of the entire design is on teachers and administrators practicing their "do it" skills to perform the problem-solving process. Continuous active participation is demanded by using a simulation situation in which the trainee "helps" a fictitious teacher or principal solve a problem using the RUPS model.

To do this, participants develop skills for using a 5-step scientific method: (1) identify the problem, (2) diagnose the problem situation, (3) consider alternative actions, (4) try out an action plan, and (5) adopt the plan. Each instructional sequence provides: purpose, objective, leader preparation, list of participant materials, and procedures. School personnel who complete the training program learn to use techniques for defining, analyzing, and solving problems. They learn: (1) to write a problem statement; (2) to use paraphrasing; (3) to use the force-field analysis method; (4) select, create, and use data-gathering instruments; (5) to diagnose teamwork relationships; (6) to spot and analyze major data results; (7) to identify one's personal behavioral style in working with a team; (8) to give and receive feedback; (9) to use specific criteria to derive implications from research; (10) to brainstorm action alternatives; (11) to apply action guidelines; (12) to identify and evaluate small-group dynamics; (13) to plan and conduct a back-home project; (14) to evaluate action taken; and (15) conduct a back-home RUPS workshop.

SUBJECT AREA(S)

Systematic problem-solving skills is the subject area of the guide.

INTENDED USERS AND BENEFICIARIES

This guide is useful for educational administrators, teachers, and other school personnel. Other populations for whom this system may be adapted include industrial and community groups.

GOAL(S) OR PURPOSE(S)

The purpose of a RUPS workshop is to prepare educators to use techniques for defining, analyzing, and solving problems. The program provides teachers and administrators with competencies in: (1) applying four guideline criteria for writing a problem statement, (2) paraphrasing in interpersonal communications, (3) using the force-field diagnostic technique, (4) selecting and creating instruments for data gathering, (5) diagnosing teamwork relationships, (6) spotting and analyzing major results in data collected, (7) identifying one's personal style of operationalizing dimensions of teamwork behaviors, (8) utilizing concepts and skills of giving and receiving feedback, (9) using criteria for deriving implications from research findings, (10) brainstorming action alternatives to meet implications derived from findings, (11) applying guidelines for planning and implementing action alternatives, (12) identifying and evaluating small-group dynamics, (13) planning a backhome project, (14) evaluating solution plans, and (15) conducting a back-home RUPS project.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes a great deal of pariticpant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

RUPS has been deemed appropriate as an initial experience and therefore has no prerequisites. Throughout the workshop, participants evaluate their learning by mutual feedback and self-testing such as paper-and-pencil tests and skill practice.

TIME REQUIREMENTS

These materials are sequential and cumulative. Each session is 90 minutes; a total of 30 hours of instruction is required in a 2-week workshop.

IMPLEMENTATION PROCEDURES

The training design requires that the total number of participants be a multiple of six. One leader can conduct a RUPS workshop with as many as 36 participants.

A workshop leader gives instructions from a manual, guiding participants through the training program. The leader should be familiar with the materials and design, but does not need to be an expert in the RUPS process.

All new leaders should personally experience workshop materials and design in the participant role before attempting to take on the leader role. Initial cotraining with an experienced leader is benefical to a new leader. Leaders without extensive experience in design should be cautioned about the possible need for revisions or additions that might arise in the group process.

The workshop site should include: a carpeted room, large enough to allow groupings of 6 and 12 to work without interfering with each other; comfortable chairs and tables for groups of 6 and 12; and beverages and refreshments available in the room, if possible.

ASSURANCES AND CLAIMS

Assurances

During a series of trial workshops, participants were repeatedly asked for feedback concerning this system. In addition to open-ended questionnaires, copies of problem identification and analysis statements created by participants during training were occasionally collected and constructive criticisms were used to revise the system. While occasional individuals stated that the system's content or form was not relevant for them, there were no reports that participants in this system had experienced physical, psychological, or sociological harm. This system trains participants to collect and use objective data from colleagues and students in an "action research" problem-solving procedure. It further provides numerous cautionary guidelines in applying the techniques of this process. It is explicitly concerned with reducing potential harm.

Social fairness issues were considered during interim rounds of trial and revision resulting in some early modifications of this system. While the generic "he" is sometimes used when referring to persons of either sex, the system is generally quite fair and has been positively accepted as such. A review panel of expert evaluators gave it a passing rating.

Claims

This system was designed with the intention that nonexperts would be able to conduct workshops. During the interim testing, the developers observed nonexperts successfully conducting workshops at Atascadero, California, and at Issaquah and Ellensburg, Washington. No developers were involved in five of the field-test workshops. The wide use of this system throughout the United States and in several other countries during the past 3 years supports a claim of easy replicability.

Field tests of this instructional system were conducted between 1969 and 1972, with 220 volunteer trainees from 6 field sites—1 in Montana, 1 in California, 2 in Texas, 1 in Washington, and a national educational research group meeting in Chicago, Illinois. Data collected from these trainees provide the following results:

(1) Seventy-six percent of the trainees perceived the training to be satisfying and worthwhile. Most of the negative responses came from two sites—one where many problems were reported and participants were strongly directed to attend the workshop, and another where participants had recently experienced positive effects of a "sensitivity training" workshop. At the latter, many objected to the comparatively high degree of structure in the RUPS design. These results, plus evaluations from earlier trials and evaluations shared with the developers from other settings, indicate a high degree of satisfaction can be expected among RUPS participants if they have appropriate expectations and have chosen to experience this workshop.

(2) Statistically significant cognitive gains were obtained, based on an analysis of the mean scores from 137 participants who responded to a 34-item test administered before and after the training.

(3) Fifty percent of respondents to a followup questionnaire 6 months after the training reported making some applications of skills learned.

(4) A followthrough impact study of classroom effects by teachers who receive this training was concluded in 1975. Results were not available at the time of this writing.

(5) An independent evaluation study conducted at the University of Idaho found significant attitude change on the part of teachers, in addition to cognitive and skill gains.

This system was developed over a 4-year period involving repeated rounds of trial and revision with K-12 teachers and administrators. Evaluation included pilot trials, interim formative testing, and a summative field test where developers were not involved.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom version:				
Participant materials	1 for each participant	7.20		
Leader's guide	1 for each trainer	9.75	Reusable	
Text	1 for each participant; 1 for trainer	3.25	Reusable	
Audiotape	1	3.50	Reusable	
Administrator's version:				
Participant materials	1 for each participant	7.05		
Leader's guide	1 for each trainer	10.05	Reusable	
Text	1 for each participant; 1 for each trainer	[illegible]	Reusable	
Audiotape	1	3.45	Reusable	Implementer
General				
Newsprint				
Markers				
Masking tape				

Note: For personnel required, see "Implementation Procedures."

RD 140 034

DEVELOPER/AUTHOR:

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Lindsay Bldg.
710 SW. 2d Ave.
Portland, Oreg. 97204

Charles Jung, Senior Developer/Author, Program Coordinator
Rene Pino, Coauthor/Developer, Program Associate
Ruth Emory, Coauthor/Developer, Program Associate

AVAILABILITY

Research Utilizing Problem Solving (RUPS) was in its second printing in 1972. It is currently available from the distributor:

Commercial-Educational Distributing Services
P.O. Box 3711
Portland, Oreg. 97208

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 035

SOCIAL CONFLICT AND NEGOTIATIVE PROBLEM SOLVING (NPS)

A 25-hour series of structured experience-based workshops to develop skills, personnel, and organizational insights required for bargaining and negotiation

Social Conflict and Negotiative Problem Solving is a structured, experience-based workshop requiring approximately 45 hours of instruction, preferably in a live-in conference setting. Emphasis is on active learner style with minimal dependence on instructional leaders. The participants are presented with multiple opportunities to involve themselves in learning about conflict at personal, interpersonal, and organizational levels. Participants are encouraged to establish and pursue their own learning goals and to support norms of openness to self-inquiry, risk-taking, and experimenting with new behavior. Opportunities are provided for personal reflection and integration. Emphasis is placed on application to back-home educational settings.

The training focus of this program is on helping individuals: (1) Perceive more clearly the phenomena they encounter associated with conflict in their organization and themselves, (2) experience and understand organizational and interpersonal processes that encourage a process of negotiative problem solving, and (3) develop skills and insights in dealing more openly with conflict.

Negotiative problem solving is defined as a process of seeking for solutions to social conflict, where the conflict is based on incompatible goals, values, or interests. This process does not assume a consensus on ultimate goals, but accepts differences as legitimate and outcomes as pluralistic. (It does assume that system survival and/or interdependence is necessary and agreed upon.) It requires ability to use skills and procedures of bargaining and negotiation.

Why such a program?

Schools have been the focal point of social and political controversy for several decades. Minority and ethnic groups have challenged the traditional assumptions and practices of American schools. Professional teacher groups have contested economic and power issues with local school boards. Conflicts within a school building or district (such as academic versus nonacademic, curricular versus extracurricular or noncurricular, open classrooms versus closed classrooms) may not always surface and be resolved. Many parents and students have become disillusioned with the quality of the educational experience. Current conflicts within the educational system and between education and the larger community are deeply rooted in differences in interests, values, goals, and functions of the various component groups and subgroups which comprise the larger system. These differences are intrinsic and natural to any evolving social organization. Schools have not always dealt adequately with the social conflict that results from these differences.

Effective alternatives for dealing with conflict require: (1) Individuals developing more appropriate perspectives and orientations toward conflict, (2) organizations changing their structures and procedures for dealing with conflict, and (3) the retraining of system members—decisionmakers and partisans alike—in skills of negotiative problem solving.

Participants have an opportunity to assess ways in which they respond to conflict under various conditions. They examine their tendencies toward responding to conflict by avoidance, accommodation, competition and/or coercion, sharing and/or compromising, collaborating, or negotiating. Opportunities will be provided to experiment with different strategies and to identify conditions when certain ways of dealing with conflict would be more appropriate than others.

Social Conflict and Negotiative Problem Solving is designed for a diverse and broad population of participants. The system is flexible in its groupings and uses dyads, trios, and large groupings in a variety of instruction designs.

RD 140 035

SUBJECT AREA(S)

This system is designed to provide conceptual awareness and experiential training in the following areas: Social conflict, organizational conflict, power, assertiveness, self-interests, interpersonal communication skills in conflict situations, and "negotiative" problem-solving skills.

INTENDED USERS AND BENEFICIARIES

This training system is designed for any adult (teachers, administrators, counselors, psychologists, curriculum specialists, and contract negotiators) in the educational system interested in improving competencies in social conflict and negotiative problem solving.

GOAL(S) OR PURPOSE(S)

This instructional system is designed: (1) To increase participants' acceptance of conflict as a natural part of social reality; (2) to increase participants' awareness of their own style and assumptions for coping with social conflict; (3) to increase participants' awareness of their own values regarding conflict and conflict utilization; (4) to increase participants' awareness of alternative ways of coping with conflict and the strengths and weaknesses of these alternatives under varying conditions; (5) to increase participants' ability to describe, analyze, and diagnose social conflict in organizational settings; (6) to increase trainees' skills in negotiative problem solving; and (7) to increase participants' understanding of major concepts and principles related to social conflict and negotiative problem solving.

PATTERNS OF USE

The workshop materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

The training is typically conducted over a 5- or 6-consecutive-day period, but may be divided into two sections.

ASSESSMENT PROVISIONS

There is no formal screening or placement procedure. However, the developers recommend that participants have prior workshop experience with a Northwest Regional Educational Laboratory instructional system such as *Interpersonal Influence*, *Interpersonal Communications* (IPC), *Research Utilizing Problem Solving* (RUPS), or *Group Process Skills* (GPS) before attending this workshop.

There is no formal testing. Participants are periodically asked to clarify their own learning goals and to assess them through self-reflection and peer observations and feedback. Participants complete a paper-and-pencil questionnaire at the beginning and end of the training, assessing their orientation toward conflict.

TIME REQUIREMENTS

Approximately 45 hours of instruction, preferably in a live-in conference setting is required. It can be conducted as either a preservice or inservice workshop, extending over 5 or 6 consecutive days or divided into two sections of 2 and 4 days.

IMPLEMENTATION PROCEDURES

This workshop can be successfully conducted with as few as 18 and as many as 36 participants. An ideal number is 30. The instructional system is designed for basic learning groups of three. The workshop needs to have at least four learning groups to insure an interesting and productive experience for participants.

The system is under development, and leader requirements have not been finalized as of this date. The workshop leader gives instructions from a manual guiding participants through the training program. The leader does need to be familiar with the materials and design, but does not need to be an expert in the "negotiative" process. This person should be experienced in handling group-process issues.

All new leaders should experience the workshop materials and design as participants before attempting the leader role. Initial cotraining with a leader who has previously conducted the workshop is an additional benefit to a new leader. Leaders without extensive experience in design should not attempt revisions, additions, or deletions from the design.

The workshop site should include: A comfortable, preferably carpeted, room large enough to allow six groupings of three to six to work without interfering with each other; comfortable chairs and tables for small groups (five to seven); and available beverages and refreshments.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

Social Conflict and Negotiative Problem Solving is still under development and testing at the time of this writing. In exploratory trials, users of the system have been asked for feedback. There have been no reports to date of actual instances of, or serious concern about, physical, psychological, or sociological harm.

Assurances of Social Fairness

Social fairness issues are being given particular concern in creating this system. They are, in fact, given some attention as part of the content of the system. Guidelines supplied by the National Institute of Education concerning sexism are being followed.

Assurances of Replicability

The system is being designed to be used by persons who have some experience, but are not necessarily experts in either the content of the training or the conduct of experiential learning designs. Evaluation, to be completed by November 1975, will deal with this issue.

Claims of Effectiveness

Evaluation is currently underway and will be reported by November 1975.

Claims of Careful Product Development

This system is being created over a 15-month period. Pilot trials have been conducted, and evaluation data from participants have been employed in three revision cycles. Two additional revision cycles are anticipated before November 1975. Interim formative testing will be reported to the point of accomplishment in November 1975. At that time, it is anticipated that evaluation data will have been collected from 200 participants at 6 sites, with at least 1 site having nondevelopers as trainers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 per trainee	To be announced		To be announced
Leader's manual	1 per trainee	To be announced	Reusable	To be announced
Newsprint				Implementer
Tape				
Felt tip markers				
Miscellaneous art supplies				
Name tags				

Note: For personnel required, see "Implementation Procedures."

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
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710 SW. 2nd Ave.
Portland, Oreg. 97204

John E. Lohman, Author/Developer, Senior Associat[illegible]
Gretchen Groth Wilson, Author/Developer, Progra[illegible]
Associate

AVAILABILITY

Social Conflict and Negotiative Problem Solving (NPS) will be available in fall 1975 from a distributor to be announced.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 036

SWRL INSTRUCTIONAL DEVELOPMENT CONTROL AND MONITORING SYSTEM (IDCMS)

A minicomputer and software system designed to facilitate research and development on teaching and learning

The *Instructional Development Control and Monitoring System* (IDCMS) is a computer-based configuration designed to facilitate and support research and development on teaching and learning.

The hardware foundation for building IDCMS capability was configured by Ampex Corporation to SWRL specifications prepared in consultation with ASCI of Palo Alto. This configuration is shown on the following page.

An important consideration in selecting initial hardware was that it be of modular design and that it permit functional as well as modular growth of IDCMS. Each increment in capability is achieved with configuration hardware, computer software, and terminal enhancements to provide the functional characteristics necessary for a range of educational R&D applications.

The system is driven and monitored by a minicomputer. Connected to the computer are electronic devices for storing audio and video presentation materials. These are loaded using standard audio and video recording devices. Communication between the system participants is effected at IDCMS response stations that handle a flexible number of concurrent participants in a given inquiry.

A special language, the Experiment Control Language, has been developed to permit researchers to write applications programs, such as a logical series of commands to control the presentation of IDCMS protocols and generate statistical reports on characteristics that are embedded into the protocol presentations.

IDCMS makes possible significant investigations of instructional theory, media characteristics, instructional program characteristics, and individual characteristics whose dimensions may be manipulated singly or in combination in IDCMS inquiry.

SUBJECT AREA(S)

Instructional research and development, instructional media research and development, research in social sciences relevant to education, and simulation and modeling for policy research related to instructional issues are the subject areas.

INTENDED USERS AND BENEFICIARIES

For the most part, users will be researchers. However, the configuration has general usefulness for all persons concerned with systematic empirical inquiry in education. It serves as powerful demonstration instrumentation for illustrating the empirical manifestation of theory and principles in education.

PATTERNS OF USE

Users must have operational access to an IDCMS configuration, and it is most convenient to obtain this access by onsite presence. However, it is feasible to conduct inquiry using IDCMS from a remote location, emulating "batch mail" procedures of electronic data processing installations.

IMPLEMENTATION PROCEDURES

These procedures differ depending upon whether one is installing or using IDCMS in the same sense that installing and using a computer differ. At present, the two IDCMS configurations in the United States and the one in Germany appear adequate for the human resource base of users in the same sense that a few acceleratrons were adequate in the early days of atomic physics. For use of IDCMS, the most feasible arrangement is to contract SWRL or the Stanford Center for Research and Development in Teaching to obtain user materials and technical advisory assistance.

ASSURANCES AND CLAIMS

IDCMS components have been tested using standard engineering procedures. As a special purpose customized configuration, IDCMS is transportable, and its use is very general. Users at SWRL are required to conform to standard organizational guidelines to insure that no application will affect participants negatively or incorporate biases proscribed by statutes, regulations, or rules of the Federal Government and that each application incorporates the highest ethical principles of the professions involved in the inquiry.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Hardware configuration	1 per installation	300,000.00-500,000.00 depending upon components	Each configuration	
Software	1 per installation	Public domain	Each configuration	
User manuals	1 set per user	10.00 per set	Each user	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

Present status specifications for hardware are available from SWRL. Configurations are operational at SWRL and Stanford. Phase I software is operational and transferable.

Phase II software will be fully operational and transferable by fall 1975.

SWRL claims common law copyright on these materials.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 037

SWRL INSTRUCTIONAL MANAGEMENT SYSTEM (IMS-3)

Computer software system, operation guides, and operational forms to allow school personnel and parents to monitor instructional programs

The *SWRL Instructional Management System* (IMS) is a simple and convenient means of providing information to teachers, principals, district administrators, and parents concerning the status of one or more instructional programs. IMS is designed for use with SWRL instructional programs, SWRL learning mastery systems, and any other programs that contain periodic resource-referenced evaluation.

IMS is available in two versions. When a scannable answer sheet format for student assessments is used, IMS includes a scoring and reporting service for teachers. When nonscannable student assessments are used, IMS relies upon teacher scores that are coded on special forms for IMS source data.

The operation of IMS requires no alteration of regular classroom procedures. Additional effort by school personnel is limited to providing a roster of initial program placement of pupils and the updating of the roster to show new and leaving students and other mobility events.

IMS regularly generates separate reports for each participating pupil/parent, teacher, school, and district. These reports are produced on a schedule during the year that is specified by the district, which may include up to eight specific dates when it would like to receive reports.

IMS resources for users include all necessary operational forms, operations guides for teachers, principals, and the district coordinator, and separate report interpretation guides for each of these groups as well as for parents.

IMS resources for purveyors of the system service include the computer software system and technical operation guides.

The IMS reports provide information concerning program status and pacing with the data aggregated and formatted separately to satisfy the differential "need to know" requirements of parents, teachers, principals, and district administrators. To insure that each group will find the provided information meaningful and useful, much development attention has been devoted to eliminating redundancy and conveying the information so that actionable conclusions may be derived directly from the reports. As a consequence of this development, IMS operations are manageable and minimally time consuming for school personnel; IMS services are cost feasible for purveyors; and IMS report information provides regular and reliable information to parties responsible for and interested in the effects of schooling. This information provides a means for: Crediting instructional accomplishments, identifying potential difficulties before they become instructional problems, and planning future instructional operations and procedures based on comprehensive program performance information.

SUBJECT AREA(S)

The subject area is instructional management information system.

INTENDED USERS AND BENEFICIARIES

IMS provides separate report information for students/parents, teachers, principals, and district administrators. The reports at the school and district levels are organized to encourage sharing of information regarding program accomplishments with the community and the public. A second-order benefit is general quality assurance data for the research and development (R&D) community and policymakers in education.

GOAL(S) OR PURPOSE(S)

The goal of this product is to provide readily interpretable information regarding instructional accomplishments of schools to those groups responsible for and/or concerned with such attainments.

ASSESSMENT PROVISIONS

The system uses the proficiency assessments that are incorporated into the instructional products and thus adds no additional assessment time.

TIME REQUIREMENTS

School personnel complete an initial roster of pupil assignments and keep this information updated. The chief professional time allocations are devoted to professional planning considerations derived from interpretations of the report information.

IMPLEMENTATION PROCEDURES

A coordinator is appointed by the district to supervise training and installation, arrange for the distribution of materials, and serve as a focal point within the district for questions that arise concerning IMS. Operations guides provide self-guided information for teachers, principals, and coordinator. Report interpretation guides that accompany the first set of reports are also provided for teachers, principals, and district administrators.

IMS source data are mailed to SWRL for processing, and reports are mailed at designated times to district coordinators for distribution to participating personnel.

ASSURANCES AND CLAIMS

The information is reported in a form that credits accomplishments rather than denigrates deficiencies. All information is aggregated and restricted to the recipients' need-to-know boundaries to discourage invidious comparisons of individuals: That is, parents receive information referencing their individual children; teachers receive information referencing their individual classes; and principals, their individual schools.

Data processing procedures protect the privacy of the participants and insure accuracy of the information that is provided.

IMS has been used with more than 100,000 students over the course of its development. Districts have included a range of demographic and education contexts.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Starter set, including rosters and operations guides	1 per teacher	1.00	Yearly	
Report interpretation guides	1 per report recipient	1.00	Reusable	
IMS processing		Varies with computer installation		

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

IMS-3, the third version of IMS, is now fully operational. SWRL claims common law copyright on the materials. Interested districts may contact:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 038

SWRL INSTRUCTIONAL PRODUCT SELECTION KIT

Resources for use in conducting inservice training in the selection of effective instructional products

The *SWRL Instructional Product Selection Kit* includes a complete set of resources for use in conducting workshops or inservice meetings that promote participants' skills in selecting effective instructional products. The materials provided in the kit are used to familiarize participants with important product selection considerations by involving them in those tasks required in actual product selection situations.

The kit includes seven components:

1. An instructor guide that suggests procedures for conducting workshops or inservice sessions.
2. Checklists of selection considerations that provide a systematic approach to analyzing, comparing, and identifying effective and reliable instructional products.
3. Booklets that discuss the rationale supporting the selection considerations presented in the kit. Each participant receives a booklet and checklist for use in product selection situations.
4. Record sheets, on which workshop participants review three simulated products at the beginning of the session. Later, after becoming familiar with the selection considerations presented in the kit, they again review the three products and compare the results.
5. Simulated program brochures that describe three elementary school programs. The brochures, patterned after publisher promotional materials currently on the market, contain sample pages from student and teacher materials. Using these brochures, participants can determine how well each of the three simulated programs meets selection considerations presented in the kit.
6. A filmstrip and audiotape that discuss selection considerations which aid in the identification of effective and reliable instructional products.
7. Sets of exercise items that provide practice in identifying instructional products that meet the selection considerations presented in the checklist.

SUBJECT AREA(S)

The kit promotes understandings related to the selection of effective instructional resources in all subject matter areas.

INTENDED USERS AND BENEFICIARIES

The kit is designed for use by professional organizations, text adoption committees, school board members, school advisory groups, graduate and undergraduate education classes, and other groups concerned with educational product selection. Development to date has included tryouts in college classes, inservice teacher meetings, and professional minitraining sessions.

GOAL(S) OR PURPOSE(S)

The kit is used in training sessions to develop participants' ability to select effective instructional products. The kit prepares users to perform the following tasks: (1) To idenofy in instructional programs and materials the presence of absence of necessary elements of a complete instructional product, (2) to determine the degree to which a given product meets the selection considerations presented in the kit, (3) to compare competing instructional products according to these selection considerations and (4) to use these considerations for product selection decisions in a variety of situations.

An operational set of criteria is provided for use in selecting instructional resources. In addition to concerns regarding instructional materials, emphasis is given to such selection considerations as: (1) Outcomes or instructional objectives the product may be used to attain; (2) assessment materials and procedures for use in determining outcome attainment; (3) reports of previous product use in a variety of school situations; and (4) installation requirements of the product, including the training of staff and monitoring the ongoing progress of pupils using the product.

PATTERNS OF USE

The kit includes all materials necessary to familiarize users with important instructional product selection considerations. The flexibility provided in the materials and procedures enables the instructor or workshop director to adopt workshop sessions to the specific needs and interests of participants.

Resources provided in the *SWRL Instructional Product Selection Kit* are typically used to conduct a workshop or inservice session that familiarizes participants with product selection criteria through active involvement in simulated selection situations. Participants examine illustrated brochures describing fictitious instructional products. These products are then ranked by participants in the order in which they would select or adopt them in their own school situations. After a filmstrip/tape presentation which describes criteria for the selection of effective instructional products, participants receive a copy of a booklet and checklist which outline these product selection criteria.

Exercise items are then completed by participants to practice determining whether given product descriptions satisfy important criteria for effective instruction. After this initial practice, participants use the product selection checklist to evaluate and rate fictitious products. These ratings are discussed, and the overall results are used as a basis on which to reevaluate participants' initial product selection. Extension activities may be used for further examination and application of the checklist criteria.

ASSESSMENT PROVISIONS

Participants demonstrate their acquisition of principles taught in the workshop as they discuss their product rankings and compare their initial and final product evaluations. Guidelines for the workshop director provide suggestions for using kit materials for further practice activities.

TIME REQUIREMENTS

The workshop can be scheduled in a single session or a series of sessions. Total time required for the conduct of the workshop is 2 to 3 hours.

IMPLEMENTATION PROCEDURES

Comprehensive information is provided for the instructor to assist in planning and conducting a workshop based on the *SWRL Instructional Product Selection Kit*. Suggestions are also presented for maximizing workshop effectiveness with various participant groups.

ASSURANCES AND CLAIMS

The materials and procedures composing the product have been designed for convenient use by the teacher or instructor with no requirement for specialized personnel. During tryouts involving college classes and inservice workshops, emphasis was placed on refining the features that facilitate flexibility of use under different organizational schemes. Tryout inquiry procedures have served to assure teacher acceptability and product exportability. They have also assured instructional utility with pupils representing the full range of ethnic and demographic characteristics.

The product does not appear to possess bias or imbalance in sexual stereotyping, cultural and racial diversity, dangerous substances, religion, and the like.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional product selection kit including guide, filmstrip/audiotape, checklists, program brochures, product selection booklets, product review record sheets, and exercise items	1 kit for an instructor and 12 participants	30.00	Filmstrip, tape, instructor guide, and simulated program brochures reusable	
Simulated program brochures (12 copies each)	1 set for each 12 additional participants	15.00	Reusable	—
Participant materials, including checklist, product selection booklet, product review record sheet, and exercise items (12 copies each)	1 set for each 12 additional participants	7.50	Yearly	

DEVELOPER/AUTHOR:

SWRL Educational Research and Development
4665 Lampson Ave.
Los Alamitos, Calif. 90720

AVAILABILITY

SWRL claims a common law copyright on these materials.

1141

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 039

A TRAINING PACKAGE FOR DETERMINING INSTRUCTIONAL PURPOSES

Materials for staff workshops in instructional planning and management

The training package consists of three separate sets of training materials designed to help school personnel increase their skills in, and knowledge and understanding of, instructional planning and management. Instructional planning is that area of educational administration concerned with providing educational opportunities for children. It requires establishing instructional program purposes, designing and implementing programs, and evaluating instructional programs. The training package is directed to the first of these three functions. The three units are "Setting Goals," "Analyzing Problems," and "Deriving Objectives." The units were developed so that each could be used by itself or in combination with any other of the units, thus enabling users to choose the particular unit that seems most likely to meet their needs.

"Setting Goals" consists of an introduction and four integrated training modules: Deriving district goals, refining goals into goal indicators, screening sets of goal indicators, and prioritizing goal indicators. Each participant assumes the role of a member of a special planning team. Working on the team, the participants derive and refine goals and establish priorities among goal indicators.

"Analyzing Problems" consists of an introduction and six modules. The titles of the modules indicate their content: Module 1—Which of the problem signals received warrant further consideration; Module 2—What student outcome problems the signals imply. As in the first unit, participants assume the role of a member of a planning team in a simulated school district.

"Deriving Objectives" consists of four modules: Module 1—The Goal Refinement Process; Module 2—Screening Objectives; Module 3—Analyzing Sets of Curricular Objectives (divided into a programed text covering educational taxonomies and a simulation); and Module 4—District Planning for Goal Refinement. This unit places greater stress on an understanding of the processes than on detailed definitions and criteria to be applied, although the latter are not ignored.

The training package also includes a coordinator's handbook containing necessary material for conducting the training in any of the three units. The material in the handbook is intended to be sufficient to permit a school staff member to conduct the training if time is taken to work through the units in advance.

SUBJECT AREA(S)

The subject of *Determining Instructional Purposes* is instructional planning and management—that area of educational administration concerned with providing educational opportunities for children. The area may be further defined as involving the establishment of instructional program purposes, the design and implementation of programs, and the evaluation of programs. This training package is directed to the first of these three functions.

INTENDED USERS AND BENEFICIARIES

These materials are intended for school personnel directly concerned with the design or selection of instructional programs to be implemented in classrooms. The specific role titles of such staff will vary from district to district but will likely include building principals, department heads, district curriculum specialists, and teachers serving on curriculum committees. The materials may also be found useful by district office administrators other than those with direct curriculum responsibilities, and by board of education members, parents, and students. The intended user group can best be defined by function rather than by particular role or title; the group need not necessarily consist of administrators.

GOAL(S) OR PURPOSE(S)

The goal of the training package is to assist in the preparation of school staff in writing more useful statements of goals and objectives for instructional programs. The general objectives for the package are to increase knowledge, comprehension, and skills in the process of selecting long-range goals and translating them into behaviorally stated goal indicators, analyzing instructional problems and determining where the available resources should be applied, and deriving objectives from the high-priority goals. Each of the three units that constitutes the package is directed to one of these general objectives.

PATTERNS OF USE

Although the numbering of the units ("1. Setting Goals;" "2. Analyzing Problems," and "3. Deriving Objectives") implies a set sequence, a different sequence or starting point may be appropriate. This depends on the purpose for which the training is being conducted. The units can be used either with existing school personnel or prospective teachers and administrators. The units reinforce each other, but each can be used independently. The coordinators can supplement each of the units with additional materials if they so desire. A unit can be used in the context of a regularly scheduled course or a special class or workshop.

ASSESSMENT PROVISIONS

The three units in the training package are similar, though not identical, in organization and types of materials included. Each unit contains a series of self-tests so that individuals can test their own knowledge and understanding of what they have read before undertaking team training activities. Suggested responses to the self-tests are also provided. No provisions are made for evaluating the overall performances of individuals at the conclusion of the units. If the coordinator wants to make individual evaluations, the developers suggest that the most appropriate way to do so is to present an additional, culminating assignment after training. Participants could be requested to apply the process covered in the unit(s) to a real-life school situation of their own choosing and write a paper summarizing the process they went through.

TIME REQUIREMENTS

The coordinator's handbook contains a checklist of tasks for each unit, including a suggested time for each task. These times represent the minimum times that the developers recommend be devoted to particular steps in training. According to these guidelines, "Setting Goals" will take 10-12 hours, "Analyzing Problems" will take 14-16 hours, and "Deriving Objectives" will take 10 hours for completion. The total time spent by any specific group, however, will vary greatly depending on such factors as its motivation, level of skill, and professional backgrounds. Ideally, the coordinator and the group members should decide at the beginning of the workshop how intensively they want to cover the materials and should be willing to condense or extend the allotted training time accordingly.

IMPLEMENTATION PROCEDURES

The training package requires no special equipment for its implementation. It is possible that the training activities may have to be fitted into a tight time schedule because of the participants' prior obligations, but scheduling will depend on the particular group.

ASSURANCES AND CLAIMS

The three units of the training package were developed concurrently, but field tested at different sites. External evaluation studies were conducted; the users interviewed by telephone represented 16 different sites and had used the units with approximately 542 school personnel and with 100 graduate students. These facts indicate that the training package is easily replicable and transportable. None of the external evaluation reports suggests that the product is in any way harmful. A careful reading of the training package did not reveal any social, ethnic, or sexual stereotyping or bias.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Unit I, *Setting Goals**	1 per participant	8.95	Worksheets consumable	In California: Association of California School Administrators, 2212 Dupont Dr., Irvine, Calif. 92664**
Unit II, *Analyzing Problems*	1 per participant	8.95	Worksheets consumable	Same as above
Unit III, *Deriving Objectives*	1 per participant	8.95	Worksheets consumable	Same as above
Coordinator's handbook	1 per coordinator	4.50	Reusable	Same as above

*A package containing all three units is available for $24.95.
**Outside California the training package is available from the developer/author.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

AVAILABILITY

Copyright was made in 1971 by the Far West Laboratory for Educational Research and Development. All rights are reserved. In California, the training package for *Determining Instructional Purpose* is available from:

Association of California School Administrators,
2212 Dupont Dr.
Irvine, Calif. 92664

Elsewhere, it is available from:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 040

COMMUNITY SCHOOLS

Research on community schools: Administration, curriculum development, facilities, staff, and finance

This 48-page report is a digest of research findings on community schools. Written in a concise, readable style, the report analyzes the most important trends in this topic and points out the practical implications of major research findings.

The paper reports on the theory, history, and implementation of community schools, a topic that has received ever-increasing attention in recent years as community schools and community education development centers have been established at numerous sites around the country.

The major purpose of the report is to present the rationale and practical steps for the implementation of community schools. Major sections explain the administration and staffing of community schools, the development of a curriculum, the role of facilities, and the question of financing. Ways to insure full community utilization of the school through curriculum and facility design are emphasized. Potential local, State and Federal funding sources are listed. A 66-item selective bibliography is included.

SUBJECT AREA(S)

The community school concept and community education are distinguished from community control of schools, which is not directly a subject of this report. Curriculum development, educational facilities, educational finance, and other topics are referred to as they relate to community schools.

INTENDED USERS AND BENEFICIARIES

The report was written primarily for school principals (not limited to elementary level) and secondarily for any school personnel or other individuals interested in the topic. Through a cooperative arrangement with the clearinghouse, the National Association of Elementary School Principals published the report as part of a school leadership digest series.

GOAL(S) OR PURPOSE(S)

The major goals of this report are to produce a readable digest of the practical implications of research literature on community schools and to enhance the communication of research findings to school principals.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Educational Management
University of Oregon
Eugene, Oreg. 97403

Dee Schofield, Author

AVAILABILITY

Order No. ED 094 447, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are available for $2.50 per copy or as part of a series of 13 reports on different topics (series price, $24 plus postage) from:

National Association of Elementary School Principals
1801 North Moore St.
Arlington, Va. 22209

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 041

DESIGNING SCHOOL ORGANIZATIONS: THEORY, RESEARCH RESULTS, AND APPROACHES

A survey-feedback approach to the identification and solution of school problems

Designing School Organizations is a publication for educators which provides an alternative approach to the identification and solution of school problems. It is based on theory which indicates that the school cannot reach its full potential unless the school structure—the way administrators and teachers are organized to do their work—matches the complexity of the school's instructional program, and both are properly suited to the school's environment.

The volume is organized into four parts. Part I, a theoretical section, is intended to give school administrators an understanding of organizations. It focuses on the structure, programs, goals, processes, and environment of organizations. The interrelationships among these elements and their implications for the various levels of school organization (classroom, school, and district) are discussed.

Part II is a research section. Its main concern is "What is known about school organizations and how they function." The majority of the research reported comes from a 3-year study of school organization conducted by the Environment for Teaching Program, which gathered longitudinal data on 34 school districts and 188 elementary schools. The discussion focuses on such areas as the relationship between organizational features and instruction at the three levels of school organization; the relationship between environment, organizational structure, and educational effectiveness; and the relationship between team organization and teacher morale. This discussion indicates the possible outcomes to be expected when the theories of part I are used to make changes and solve school problems.

Part III is an action or strategy section. Its purpose is to introduce administrators to specific techniques that can be used in identifying and solving problems or making desired changes. It introduces the concept of organizational development, or the use of knowledge from the behavioral sciences to bring about change. The major emphasis, however, is on a five-stage, survey-feedback approach which helps educators to recognize school problems and evaluate solutions. These stages are:

1. Information gathering and diagnosis—designing and conducting a survey to gather information about the organization, its structure, environment, and program, and analyzing the information to identify or pinpoint organizational trouble spots;
2. Developing an organizational approach to problem solving—communicating a structural perspective of organizations to teachers and administrators;
3. Feedback—communicating to participants at both policy and peer levels the results of the information-gathering survey, and using the organizational problem-solving model to highlight and develop consensus on possible problem areas;
4. Identifying strategies for change—selecting a strategy for bringing about change or developing congruence between the organization's structure and its environment or program;
5. Evaluation—assessing the effects of the change strategy.

Part IV presents case studies showing how this approach has been applied in schools. Concrete examples of the organizational change process and its results illuminate the pitfalls and the opportunities presented by an approach which combines objective information, organizational theory, and a highly participatory and interactive process for identifying and solving school problems.

SUBJECT AREA(S)

The subject areas are evaluation, school administration and organization, and problem solving.

INTENDED USERS AND BENEFICIARIES

The volume is intended for use by school administrators. The survey-feedback process is applicable in small or large school districts or individual schools at both the elementary and the secondary levels. The manual will also be of use in college courses for the preservice training of teachers and administrators.

GOAL(S) OR PURPOSE(S)

The school administrators using this manual will be able to bring about systematic organizational change or improvement in their schools or districts based on a sound grasp of relevant theory and research findings, knowledge of specific survey-feedback approaches, and case studies showing how this approach has been applied.

PATTERNS OF USE

The survey-feedback structural approach requires the school or district to establish policy and peer groups representing all those potentially affected by the change process (administrators, teachers, students, parents, and other community members).

ASSESSMENT PROVISIONS

The effectiveness of the approach described in this manual will be determined by the degree to which actual changes in school organization are made and found to be cost effective.

TIME REQUIREMENTS

The time required for this product will vary with the severity of the problems identified and the commitment of the school staff to the effort needed to solve them.

IMPLEMENTATION PROCEDURES

The volume is self-contained. Time and other costs required to make full use of it depend on the commitment an individual school district is willing to make.

ASSURANCES AND CLAIMS

Assurances

The knowledge base for *Designing School Organizations* is drawn from several years of research, culminating in a longitudinal study carried out in 188 schools in 34 districts in 6 counties. Staff members of these schools have contributed to the formation of both the relevant theory and the survey-feedback approach. Workshops on implementing the approach have been conducted with groups from the Association of California School Administrators, and a formal affiliation has been negotiated between SCRDT and ACSA providing for further field testing, technical assistance, and dissemination arrangements. Feedback from previous presentations has indicated that the approach is transportable and replicable. No evidence of negative effects or social bias in the materials has emerged from the workshops.

Claims

Reactions to the workshops have been strongly positive. Feedback from the various contacts is being incorporated into the final revision.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Designing School Organizations: Theory, Research Results, and Approaches (text volume)	1 or more per school or district	Not determined	Reusable	Not determined
Survey-feedback instruments	1 or more sets per school or district	Nominal	As used	Not determined

DEVELOPER/AUTHOR:

Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

Terrence E. Deal, Research and Development Associate

AVAILABILITY

The final draft of *Designing School Organizations* is scheduled for completion in November 1975.

For further information, please write:
Director, Publications and Dissemination
Stanford Center for Research and Development in Teaching
Stanford University
Stanford, Calif. 94305

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 042

DEVELOPING OPEN EDUCATION IN AMERICA

Community and school environment prerequisites for open learning

Developing Open Education in America is for teachers, prospective teachers, principals and other administrators, and parents. It is not intended to describe the appearance or the benefits of an open classroom or to give directions and inspiration for the task of creating one. Rather, it is intended to stimulate thought about the conditions required within a school system if teachers are to be able to move toward openness.

Substantial and lasting change—affecting many teachers and children, not just a few classrooms—calls for substantial, long-term help for teachers from others in the school community. This need is amply demonstrated by the experience of the open-education movement in England, where the principal, curriculum, adviser (or resource teacher), teacher education, and relationships with parents all function to energize—or at least to minimize interference with—the teacher who resolves to change. In the United States, wherever open education is practiced on a scope broader than the single classroom, one also finds reliance on one or more of these "enablers" for teachers. This book is a report of the varied ways in which several open-education projects in American public schools have provided more than token support for teachers as they strive toward real change.

The book is divided into seven chapters: Open Education in America: Native or Transplant?, Process or Model?, A Different Role for the Principal, Creating the Curriculum, A New Resource—The Advisor, The Teacher as Learner, Relationships with Parents, and Evaluating Children's Growth. A short bibliography of references and curriculum materials, and questions for review, discussion, school profiling, or problem solving are included in the appendixes.

SUBJECT AREA(S)

The subject area is open education.

INTENDED USERS AND BENEFICIARIES

The intended users are teachers, prospective teachers, principals and other administrators, and parents who are interested in examining the open-education environment.

ASSURANCES AND CLAIMS

A prototype of the book was field tested with a group that included teachers, parents, resource teachers, student teachers, a teacher center director, principals, and county office personnel. Revisions were made based on participants' comments; the final draft was reviewed by a panel of leaders in open education.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and
Development
1855 Folsom St.
San Francisco, Calif. 94103

Kathleen Devaney

AVAILABILITY

The book was copyrighted by the Far West Laboratory in 1974. It is currently available for $3.75. Order from:

National Association for the Education of Young
Children
Publications Department
1834 Connecticut Ave., NW.
Washington, D.C. 20009

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 043

DIRECTORY OF ORGANIZATIONS AND PERSONNEL IN EDUCATIONAL MANAGEMENT

A sourcebook of educational administration: the subject area and dissemination policy of the leading organizations and researchers

The directory, an 82-page reference tool, was compiled to help educational practitioners and researchers locate information about research in educational management. The fourth edition lists 152 organizations and 535 individuals.

The section on organizations is designed to guide users to information sources. Each listing indicates the organization's policy for supplying information on request and its available publications. This section is especially useful to practitioners, who can identify sources of information or other services provided by the organizations. Unlike previous editions of the directory, the latest excludes profitmaking organizations.

The second, and larger, portion of the directory lists subject areas, research affiliations, and publications of 535 researchers interested in various aspects of educational administration. The primary purpose of the personnel section is to facilitate communication among researchers, who can use it to locate others doing work related to their own.

Two cross-referenced subject indexes and a geographic index are other features of the directory. Growth and change in the field of educational management are reflected in the subject indexes. For instance, the number of entries on secondary schools has tripled since publication of the third edition, and there are four times as many entries on special education. The appearance of new index topics—women, alternative schools, open education, and futurism—reveals shifting interests among researchers.

SUBJECT AREA(S)

The subject area is educational management, as used to define the scope of the directory, which includes all aspects of the leadership, administration, and structure of public and private educational organizations at all levels and the provision of facilities for their operation.

Specific topics receiving particular attention include accountability, alternative schools, collective negotiations, community schools, computers, educational facilities, evaluation, school finance, and systems approach.

INTENDED USERS AND BENEFICIARIES

Anyone—administrator, school public relations director, planner, designer, teacher, and researcher—involved or interested in educational management will find the directory a useful resource. Practitioners will benefit particularly from the information on specific publications and other information resources available from organizations. Researchers will be interested in identifying colleagues in the personnel section who are doing work related to their own.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To guide users to sources of information on educational management; (2) to facilitate communication among researchers; and (3) by means of these objectives, to contribute to the overall improvement of the practice of and research in educational management.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Educational Management
University of Oregon
Eugene, Oreg. 97403

Philip K. Piele, Director
Stuart C. Smith, Assistant Director and Editor

AVAILABILITY

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University of Oregon
Eugene, Oreg. 97403

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 044

FREE/OPEN SCHOOLS

Alternative, experimental, and traditional schools:
A comparison

This paper describes the educational movement toward alternative schools and suggests further sources of information concerning this change in American education. Following an analytical comparison of open and traditional schools, the author discusses some of the most important perceived problems related to open schools. Problems noted are financing, staffing, difficult students and parents, noise levels in open areas, personal space, attendance and advising, and reentry into traditional schools. An annotated bibliography includes not only related printed material but also a list of organizations that the reader may find helpful in further explorations related to free and open schools. Information is provided to the user concerning the availability of some of the documents from the Educational Resources Information Center (ERIC) microfiche collection.

SUBJECT AREA(S)

Alternative, experimental, and traditional schools; educational change, development, and problems; and open education.

This paper introduces terminology; gives analytical description of open versus traditional schools, including custodial and managerial aspects, social status and social relations, indoctrination and value formation, and education; discusses common problems of both types of schools; and provides an annotated bibliography.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are school administrators (kindergarten through adult level), parents of schoolchildren, and kindergarten through adult-level teachers.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science
Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Nicholas Helburn, Author

AVAILABILITY

Order No. ED 081 650, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available for $1.15 from the developer:
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 045

GUIDE TO THE DEVELOPMENT OF A REGIONAL CONSORTIUM OF STATE DEPARTMENTS OF EDUCATION

A developmental history of the Appalachian Regional Consortium

This document presents a description of the activities conducted in developing the Consortium of State Departments of Education in the Appalachian Region and the rationale supporting each organizational activity. It is composed of three major sections: (1) Preliminary organizational activities, (2) formal organizational activities, and (3) programmatic development activities. Appendixes of the document contain an agreement of incorporation and a set of Consortium bylaws.

SUBJECT AREA(S)

The subject of the *Consortium Guide* is the development of a formal organization of State departments of education.

INTENDED USERS AND BENEFICIARIES

The target audience of the *Consortium Guide* is State department of education officials concerned with developing cooperative working arrangements with other State departments of education.

GOAL(S) OR PURPOSE(S)

The purpose of the *Guide to the Development of a Regional Consortium* is to present to those interested in developing similar organizations a tested pattern of activities found to be useful in initiating a formal interstate organization.

PATTERNS OF USE

The subject matter of the *Consortium Guide* is sequenced in such a manner that those considering the initiation of an interstate organization can follow step by step the activities projected in the document, beginning with those activities designed to establish a need for the organization and ending with activities designed to evaluate the total process.

DEVELOPER/AUTHOR:

Division of Diffusion
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

The *Consortium Guide* was distributed to key State department of education officials throughout the United States in November 1973. A limited number of copies of this document are available through the Appalachia Educational Laboratory, Inc., in Charleston, West Virginia, and it may also be found in ERIC. There are no plans to revise or republish this document.

ASSESSMENT PROVISIONS

No provisions have been made for assessing the effectiveness of the implementation of the *Consortium Guide*.

TIME REQUIREMENTS

No time requirements have been established for the implementation of the *Consortium Guide*.

IMPLEMENTATION PROCEDURES

No special equipment, facilities, services, or organizational changes are required.

MATERIALS AND EQUIPMENT

No additional materials, equipment, or personnel are required for implementation.

ASSURANCES AND CLAIMS

The procedures and activities recommended in the *Guide to the Development of a Regional Consortium* have proven effective in the development and operation of a multistate consortium of State departments of education. At the time the guide was written, the consortium had not been in operation long enough to properly evaluate the long-range effectiveness of either the activities carried out in developing the organization or the model charter and bylaws.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 046

A GUIDE TO ORGANIZING SHORT-TERM STUDY ABROAD PROGRAMS

Information on arrangements for study abroad for groups of high school and college students

This guide is designed for those interested in organizing and/or participating in short-term study-abroad programs. The following main topics are related in detail: The nature of the program; the budget; winning administrative approval for the program; announcing the program; orientation; the program director, the campus, courses, and itinerary; guided tours; and social events, recreation, and sports. Readymade study-abroad programs and foreign study opportunities in the Western Hemisphere are briefly discussed.

SUBJECT AREA(S)

This guide gives practical information concerning arrangements to be made for study abroad by groups of high school and college students under the supervision of individuals who lack experience in the travel industry.

INTENDED USERS AND BENEFICIARIES

Although intended for the foreign language teaching profession, this guide will be of aid to anyone contemplating the establishment of a short-term study-abroad program.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1611 North Kent St.
Arlington, Va. 22209

Paul Griffith

AVAILABILITY

Order No. ED 100 183, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies may be obtained in very limited supplies from:
ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1611 North Kent St.
Arlington, Va. 22209

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 047

THE IMPACT OF LEGAL DECISIONS ON THE FUTURE OF EDUCATION

Court decisions affecting teaching and teacher education

After setting out some statements on ideologies which have contributed to the melting-pot theory of education, the author examines the rationale for teacher-licensing procedures and the interpretation of title VII, which gives protection from discriminatory practices as it affects the licensing of teachers. Recent court opinions are discussed in relation to the declared need for a principle of neutrality in respect to language, by which the language or dialect of any student should not be disparaged or denied. Examples involving Chinese-speaking and Spanish-speaking students are cited. The Treaty of Guadalupe Hidalgo between the United States and Mexico in 1848 recognized the differences in customs, traditions, and language of the people of New Mexico; and the ninth amendment to the Federal Constitution provides grounds for claiming the right to such differences by all U.S. citizens.
Court cases dealing with obscenity, the study of comparative religion, Indian education, and the traditions of the Amish community are examined in this context. A model for preparing educational personnel to assist in the building and preservation of community identity is proposed. It would give primary consideration to the sufficiency of the individual and the development of decent and humane communities.

SUBJECT AREA(S)

Teacher licensing procedures, court decisions affecting teaching, and teacher education.

GOAL(S) OR PURPOSE(S)

The goals of this product are to outline court litigation and other legal decisions relative to teacher selection, certification, assessment, and admissions; and to aid in the development of due-process procedures to protect the rights of professionals, students, and the constituency of schools and colleges.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle, NW., Suite 616
Washington, D.C. 20036

Larry Freeman

AVAILABILITY

Order No. ED 097 291, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
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Arlington, Va. 22210

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 140 048

PARENTAL AND COMMUNITY INVOLVEMENT IN EDUCATION AND TEACHER EDUCATION

History, model programs, and benefits of parental and community involvement

This examination of parent and community involvement in elementary and secondary education is in two parts. The brief first section considers the historical aspects and identifies possible kinds of involvement and the benefits that result, as well as some of the obstacles that may be encountered. The second section is an extensive review of the literature, including the following topics: Community involvement, with subsections on the principles of community involvement, school constituency organizations, approaches to community involvement, and community education; higher education involvement, with subsections on community colleges, universities, teacher centers, and the preparation for and professionalization of community education; and parent involvement, with subsections on the levels of such involvement, a model, parental participation and attitudes, cultural identity and self-concept, academic gains, desegregation, and guides for implementation.

SUBJECT AREA(S)

The history of parental and community involvement, notable programs, and benefits of such programs are the subject of this publication.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are collegiate and local- and State-agency personnel, lay groups, and boards of education.

GOAL(S) OR PURPOSE(S)

This monograph provides a needed information base on the subject of parental and community involvement in education and teacher education. Highlights of programs are noted.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Judith Dobson, Author
Russell Dobson, Author

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 049

STUDENTS' RIGHTS: A GUIDE TO THE RIGHTS OF CHILDREN, YOUTH AND FUTURE TEACHERS

Case histories of student rights to freedom of expression, search and seizure, dress, invasion of privacy, and discipline

After a preface in which Judge Robert Landry cites the importance of the Gault decision, the paper summarizes the rights of students in elementary and secondary schools. This is presented through case histories. The decisions are grouped into the categories of freedom of expression, search and seizure, dress and grooming, invasion of privacy, and discipline. The rights of students in programs of teacher education are then discussed in 10 parts: The right of petition; the rights of due process and equal protection; the rights of speech and press; the right of freedom of religion; the rights of person, property, and privacy; the right to dissent; the right against self-incrimination; and the right to trial by a jury of peers. The final section presents a bill of rights for future teachers. Student teachers' and interns' rights are elaborations and extensions of the previous analysis on the rights of children and youth in lower schools.

SUBJECT AREA(S)

This document summarizes the legal rights of students in lower schools and in teacher education programs as interpreted in the courts.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are students, particularly teacher education students; public school teachers and administrators; teacher educators; and those concerned with the legal rights of the profession.

GOAL(S) OR PURPOSE(S)

The goals of this document are to inform the user of the legal facts regarding student rights in elementary and secondary schools, and to establish guidelines for rights of student teachers at a time when legal issues in the teaching profession are being debated.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Martin Haberman

AVAILABILITY

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P.O. Box 190
Washington, D.C. 22210

Copies are also available from the developer for $2.50.
Association of Teacher Educators
1701 K St. NW.
Washington, D.C. 20006

INFORMATION CURRENT AS OF APRIL 1975 ■

PLAYGROUND FACILITIES AND EQUIPMENT

A report on implications of major research findings on playground facilities and equipment

This 32-page report is a digest of research findings on playground facilities and equipment. Written in a concise, readable style, the report analyzes the most important trends in this topic and points out the practical implications of major research findings.

The paper reports on contemporary thinking about play as a learning experience, playground equipment designed to induce specific types of learning, and development of new design criteria.

The major purpose of the report is to illustrate the theories of play as a learning experience and the theories of equipment design, and to show practical steps for planning playgrounds that provide the desired learning experiences. A major section explains the planning process, including concern for the needs of children, parents, and the community; financial considerations; and equipment suggestions. Examples of innovative playgrounds are given, and playgrounds for the handicapped are discussed. A 55-item selective bibliography is included.

SUBJECT AREA(S)

Playground facilities and equipment are discussed in their relationship to the concept that children learn from play and that what they learn is affected by playground design and equipment quality. Theories of equipment design and planning of playgrounds are treated in this context.

INTENDED USERS AND BENEFICIARIES

The report was written primarily for school principals (not limited to elementary level) and secondarily for any school personnel or other individuals interested in the topic. Through a cooperative arrangement with the Clearinghouse, the National Association of Elementary School Principals published the report as part of a School Leadership Digest series.

GOAL(S) OR PURPOSE(S)

The goals of this report are to produce a readable digest of the practical implications of research literature on playground facilities and equipment and to enhance the communication of research findings to school principals.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Educational Management
University of Oregon
Eugene, Oreg. 97403

David Coursen, Author

AVAILABILITY

Order No. ED 094 477, $0.75 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:

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P.O. Box 190
Arlington, Va. 22210

Copies are available for $2.50 from the developer or as part of a series of 13 reports on different topics (series price, $24 plus postage).

National Association of Elementary School Principals
1801 North Moore St.
Arlington, Va. 22209

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 051

SOURCEBOOK OF TRAINING PRODUCTS IN INSTRUCTIONAL PLANNING AND MANAGEMENT

A catalog of training products with a user's guide to product review and selection

The *Sourcebook of Training Products in Instructional Planning and Management* was developed to increase the skill, knowledge, and understanding of school personnel in the area of instructional planning and management. Its purpose is to increase awareness of the kinds of products that are available for providing training in instructional planning and management, and to provide sufficient information about these products to permit a preliminary screening in the process of planning for training.

The book has three major sections. The first section surveys instructional planning and management and includes some guidelines for reviewing and selecting materials to train personnel in this area of staff development. The second section contains descriptions of 15 program packages that can be implemented in a school district to meet specific needs for training in instructional planning and management. Many of these packages may also be used in college or university courses. The descriptions are generally three or four pages long and contain enough information to allow most users to decide whether to preview the program package itself. The third major section is an annotated list of 27 supplementary training resources that can be useful in complementing a training program in instructional planning and management.

A product description was included in the *Sourcebook* if the product met all the following five criteria: (1) The product was intended to provide or support training activities; (2) the training was designated for middle-management school personnel at the preschool, elementary, or secondary level; (3) the training was in the content area of instructional planning and management; (4) the completed product would be available for use by January 1975; and (5) the product had been made available within the last 5 years. The 42 products that met these criteria were selected from a pool of 152 products.

SUBJECT AREA(S)

Subject areas are instructional planning and management: that area of educational administration concerned with providing educational opportunities for children. This area may be further defined as involving the establishment of instructional program purposes, the design and implementation of programs, and the evaluation of instructional purposes.

INTENDED USERS AND BENEFICIARIES

The *Sourcebook* was designed for all personnel who may have a stake in the selection and conduct of instructional planning and management training activities—teachers, department heads, principals, curriculum specialists, assistant superintendents, or superintendents at preschool, elementary, and secondary school levels.

GOAL(S) OR PURPOSE(S)

The goal of the *Sourcebook* is to provide school people with efficient and effective information on available training products. It is intended as a tool to increase awareness and understanding of new products for training personnel in program goal setting, planning development, and evaluation.

PATTERNS OF USE

The *Sourcebook* is an aid to instructional planning, and the particular way in which it is used depends on the immediate needs of those who consult it.

MATERIALS AND EQUIPMENT

The *Sourcebook* costs $3.95.

ASSURANCES AND CLAIMS

A review form of the *Sourcebook* containing 15 programs and 25 resource descriptions was produced in August 1974. The book was sent to the individual or organization responsible for the development and/or distribution of each of the 15 programs described, with a request that the description be reviewed for accuracy. The entire book was also sent for review to three people judged to be particularly knowledgeable about the needs and perspectives of educational management and to two specialists in educational information dissemination and utilization. All of the reviewers expressed the belief that there is a real need for a product like the *Sourcebook*. None thought that the criteria used in the selection of products for description limited the extent to which the book could be useful in meeting the needs of school staff.

RD 140 051

All generally agreed that the book fulfilled its function as an information resource tool, that it compared favorably with other available information resources, and that it was not redundant with existing information documents. Their comments indicate the *Sourcebook* is transportable; its use does not require the presence or assistance of the developer.

An examination of the *Sourcebook* does not reveal any form of social bias, including ethnic and sexual stereotyping.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Nancy McCutchan
Rita Fernandez
Jean Coleman

AVAILABILITY

The *Sourcebook* is copyrighted 1975 by the Far West Laboratory for Educational Research and Development. It is currently available from the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 140 052

STUDENT PRESS RIGHTS: STRUGGLES IN SCHOLASTIC JOURNALISM

Court cases and decisions concerning student publications and underground newspapers

The purpose of this monograph is to acquaint journalism teachers, faculty advisers to student newspapers, administrators, and students with the court cases and decisions which have been made concerning student publications and underground newspapers. The chapters in the book include "Students' Rights: Background," which discusses the impact of the first amendment on the student press and stresses the importance of free expression for high school students; "Students' Rights: Development," which examines the effect of the "Tinker" decision in establishing at which point the student expression may be curtailed if school officials forecast a disruption of educational activities; "Students' Rights: Particular Circumstances," which presents cases exploring students' rights of expression on and off campus grounds; "Students' Rights: Administrative Regulations Allowed by Courts," which considers the powers of school administrators in dealing with student expression and cites several cases in which the courts upheld the administrators; and "Students' Rights: Additional Matters," which discusses cases concerned with the advertising and sales of student publications, the reinstatement of students following litigation, and the still-undefined role of the publications adviser.

SUBJECT AREA(S)

Journalism, freedom of speech, court litigation, student rights, student publications, censorship, school publications, school newspapers, secondary education, due process, and administrator role

INTENDED USERS AND BENEFICIARIES

The intended users of this product are secondary school teachers and college professors of journalism.

DEVELOPER/AUTHOR:

ERIC Clearinghouse
805 W. Pennsylvania Ave.
Urbana, Ill. 61801

AVAILABILITY

Order No. ED 096 691, $1.75 (microfiche), add $0.26 (postage), $4.43 (hard copy), add $0.76 (postage). Order from:

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P.O. Box 190
Arlington, Va. 22210

Copies are also available at a cost of $3.95 for nonmembers and $2.95 for members from the developer.

JEA Publications
912 Market St.
LaCrosse, Wis. 54601

INFORMATION CURRENT AS OF APRIL 1975 ■

1159

RD 140 053

YEAR-ROUND SCHOOLS

Parent, teacher, and taxpayer questions and answers on the topic of year-round school

This 48-page report is a digest of research findings on year-round schools. Written in a concise, readable style, the report analyzes the most important trends in year-round schools and points out the practical implications of major research findings.

The paper reviews literature dealing with the advantages and disadvantages of year-round schools. It examines some of the criteria developed by authorities to help school systems determine whether year-round plans are feasible in their particular cases. Plans in operation are surveyed, and ways in which school districts may explain the plans to parents, teachers, and taxpayers are considered.

The major purpose of the report is to review some frequently raised questions, issues, and suggested solutions. Chapters deal with the question of economics (Is money saved?) and the question of quality (Is education improved?). Other sections include planning the program after assessing the needs and selling the program by obtaining the involvement of the community and the commitment of staff and students. Operational plans—where they are and how they are doing—are surveyed. A 76-item bibliography is included.

SUBJECT AREA(S)

The year-round school concept includes a number of school calendar plans varying the time that students spend in school during a year. Trimester, quarter, and quinmester plans, as well as continuous school-year plans (including multiple trials and flexible all-year plans) are discussed.

INTENDED USERS AND BENEFICIARIES

The report was written primarily for school principals (not limited to elementary level) and secondarily for any school personnel or other individuals interested in the topic. Through a cooperative arrangement with the clearinghouse, the National Association of Elementary School Principals published the report as part of a school leadership digest series.

GOAL(S) OR PURPOSE(S)

The major goals are to produce a readable digest of the practical implications of research literature on year-round schools and to enhance the communication of research findings to school principals.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Educational Management
University of Oregon
Eugene, Oreg. 97403

Dee Schofield, Author

AVAILABILITY

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National Association of Elementary School Principals
1801 North Moore St.
Arlington, Va. 22209

INFORMATION CURRENT AS OF MARCH 1975 ■

GUIDANCE
AND
COUNSELING

1161

OVERVIEW

LIBBY BENJAMIN
The University of Michigan
Ann Arbor, Michigan

The field of guidance and counseling involves working with individuals and groups in a variety of settings to help them to understand more fully their human potential and to use this knowledge to reach a higher level of self-fulfillment and become contributing members of society. The major goal of those working in the field is to promote in individuals the understanding and skills required for self-awareness, decisionmaking and problem-solving, and making constructive plans and decisions.

Individual counseling by spiritual leaders, parents, physicians, respected colleagues, and friends has existed for centuries. However, guidance and counseling began formally as a field in the early 20th century, growing out of the need to help people make appropriate occupational choices. Since that time, the field has broadened to include assistance to individuals in all aspects of their lives. In recent years the field has given increased attention to career development and life planning. Over 350 institutions of higher education now offer graduate training in counseling and guidance, which has produced counselors found in most secondary schools and colleges, with growing numbers found at the elementary level.

The remarkable growth of the field of guidance and counseling is due to a number of factors, indicative of the vastly changed nature of society itself. The conflict and anxiety found in contemporary society can be attributed to factors such as stimulus overload information bombarding us from all sides, creating unlimited choices and mobility, persons moving and drifting. These factors have contributed to the current barrier of separation and isolation in society. The changing nature of society works to the detriment of warm human relationships. Therefore, a major focus of counseling efforts has been on enhancing human relationships so that persons communicate more effectively on all levels of interaction. In this environment, individuals need support and tools to deal with stresses inherent in the society so that they can cope with and function in society, rather than being debilitated by the forces.

Also society is experiencing the social and political emergence of newly defined interest groups, such as women, minorities, older persons, and handicapped, who are assuming new roles and responsibilities. These individuals need to learn new skills in order to deal appropriately with the new opportunities available to them.

Dr. Libby Benjamin is the Associate Director of the Counseling and Personnel Service Information Center. The Center is affiliated with the School of Education of the University of Michigan in Ann Arbor, Michigan.

Because the environment and the individual within the environment are part of a dynamic unit that is always changing, individuals must continually review, revise, or renew their goals. Consequently, new skills are needed to establish life career plans and goals, overcome obstacles toward achieving these goals, and adapt to inevitable change. These are concerns that formal education has not traditionally dealt with. However, schools are increasingly recognizing the need to provide students not only with formal academic education, but also with the skills needed to cope with the many roles played out in adult life as citizen, parent, employee, pursuer of leisure time, spouse, and coworker.

Because of these present concerns, the counseling profession is continually examining and researching its efforts to provide individuals with helpful and growth-producing skills. The trend towards accountability in counseling, exemplified in the emphasis on competency-based programs incorporating systematic evaluation of outcomes and quantifiable evaluation measures of skills attainment, has had great impact on the profession. For example, researchers are increasingly assessing the effectiveness of various kinds of counselor interventions individual, group, peer, system. These approaches are tested in light of growing numbers of theories and methods in counseling behavior modification, transactional analysis, gestalt therapy, biofeedback, and group therapy. The relationship between specific counselor practice and student/client outcomes has become as important as the different processes involved. Other studies underway deal with determining the efficacy of alternate modes of counseling, exploring differential staffing, peer counselors, and computerized counseling programs.

Increasingly, counselor education institutions are gearing up their programs to respond to these new demands. The traditional programs that have focused on training the counselor in the one-to-one counselor/client relationship have been broadened to include counselor training in other kinds of skills, such as incorporating skill training in needs assessment, writing behavioral objectives, and utilizing measurement techniques. This trend toward more empirical analysis is reflected in different areas, such as career development in which studies of adolescent development are underway with the purpose of assessing the impact of various factors affecting the individual's career decisions.

Needed research

In counseling, just as in the larger field of education, where research focuses on learning, some problems remain unresolved. For example, what is the optimum intermixture of various practices to reach a given behavioral outcome use of individual vs. group approaches, use of outreach and support personnel, or use of multimedia learning resources? How can these be combined to accomplish maximum learning and growth? What is the best way of determining clients' needs so that the most appropriate assistance and resources are available to them? What methods or approaches are most effective in work with different population groups minorities, handicapped, drug abusers, etc.? What is the optimum length of treatment? Can most client needs be met through short-term therapy, or is determination of treatment time an intuitive decision made by the counselor? Is differentiated staffing effective? These are some of the issues that will affect the adequacy of counselor strategies in facilitating behavior change.

Counselors are faced with additional problems in conducting followup studies of persons who have been involved in various assistance programs. Clients' feedback about change or improvement after elapsed time is important to further research efforts, since some evidence exists to suggest a high rate of regression to prior behaviors. A major problem results from the research process itself. Investigators encounter difficulty in obtaining research samples of adequate size and in developing appropriate statistical techniques to deal with such small samples. Many groups are reluctant to become research subjects, and those who are willing often give biased results because of the psychological effects inherent in the knowledge of being a research subject.

NIE contributions to field

Products developed under the sponsorship of the National Institute of Education represent an attempt to respond directly to some of these research trends and practitioner needs. Even though information exists, counselors have difficulty in acquiring the most comprehensive, relevant, and up-to-date resources. The major thrust at the Educational Resources Information Center/Counseling and Personnel Services Information Center (ERIC/CAPS) has been to coalesce the most current information and resources into a form directly accessible and usable by various groups. One important function is to identify needs and problems that have not yet been clearly defined by the profession, to collect and analyze relevant information, and thus attempt to aid the profession in developing programs and products to respond to those needs.

Several publications of the Center address the broad scope of the literature. For example, *Impact* magazine was designed for this purpose. In colorful, readable format, counselors have access to the most current developments in the field. For an extensive bibliographic collection, *Searchlights* indexes ERIC documents and other resources to provide readers with organized and readily usable searches of the literature. Other publications include presentations by nationally recognized experts in the field on topics of major concern, such as *An Experimentalist Approach to Counseling*, and materials on topics directed toward practitioner needs, such as the *Behavior Modification Handbook for Helping Professionals*. In addition, publications have included information on accountability in the profession, strategies for system development, information on hiring practices (type of personnel and appropriate roles), and evaluation procedures for professionals and paraprofessionals. The concern for assisting persons to implement, adopt, and adapt new approaches and practices has led to the production of a new monograph series designed to provide users with the knowledge and skills necessary for successful implementation of these new approaches. These publications will be available early in 1976.

In the future, ERIC/CAPS will continue to maintain and develop a network to identify emerging needs and concerns of practitioners, educators, and researchers in helping professions. This "early warning system" is useful for determining the direction of research in order to develop and produce materials and resources which go beyond the scholarly or informative to be directly usable and useful.

Note: The reader is referred to the section on Education and Work: Career Counseling for additional products on guidance and counseling.

AN EXPERIMENTALIST APPROACH TO COUNSELING

A discussion on the role of the counselor in contemporary society

This monograph is a 62-page program that attempts to project the role of the counselor in contemporary society from the basic philosophical themes of John Dewey. Usually, the more philosophical or theoretical documents are thought to be of more interest to researchers than to counselors in the field. However, any technique employed by a counselor must be grounded in a systematic theory or philosophy. Therefore, counseling theory is not only relevant to a counselor's work, but it also becomes a very personal matter by providing counselors with a foundation on which their styles of interaction with clients and coworkers are based.

This monograph is intended to stimulate discussion and thinking by counselors in the field with regard to their own theories of counseling.

SUBJECT AREA(S)

Part 1 deals with three basic themes of John Dewey's philosophy: The nature of man, the method of intelligence, and the democratic ideal. Part 2 is a discussion of the counselor roles which stem from Dewey's treatment of these themes, including the counselor as social investigator, the counselor as social educator, and the counselor as social reformer.

INTENDED USERS AND BENEFICIARIES

Although this monograph would be of interest to researchers and counselor educators, it is intended primarily for practicing counselors.

GOAL(S) OR PURPOSE(S)

The purposes of this monograph are: (1) To stimulate thought and discussion of counseling theory and philosophy by counselors in the field, (2) to assist counselors in strengthening and clarifying their own philosophies, and (3) to help clear the way for input from the "grassroots" level into higher level thinking and policy planning regarding the role of the counselor in contemporary society.

MATERIALS AND EQUIPMENT

Plastic bound, hard copy is available from ERIC/CAPS for $3.30. ERIC Document Reproduction Service (EDRS) microfiche copy costs $0.75 plus $0.18 postage. EDRS paper copy costs $3.15 plus $0.26 postage.

ASSURANCES AND CLAIMS

An Experimentalist Approach to Counseling does not perpetuate sexism, racism, or other biases such as those related to religion, age, and socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Richard T. Knowles, Author
Cho-Yee To, Author

AVAILABILITY

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ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

RD 150 002

BEHAVIOR MODIFICATION HANDBOOK FOR HELPING PROFESSIONALS

A handbook of behavioral techniques useful to counselors

This monograph will be a practical "how-to" handbook describing various behavioral techniques that will be useful to counselors in working with their clients. Social professionals have communicated a high interest in obtaining such a focused publication that would bring together in concise form such procedures for using behavioral techniques effectively.

SUBJECT AREA(S)

This document will focus on specific behavioral counseling techniques that can be useful to counselors.

INTENDED USERS AND BENEFICIARIES

Intended users are counselors, counselor educators, and related professionals.

GOAL(S) OR PURPOSE(S)

The goal of this monograph is to assemble useful, practical, and proven behavior-modification techniques in handbook form to be utilized by professionals in their work.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

AVAILABILITY

This monograph will be available in October 1975 from:
ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 003

COUNSELING OLDER PERSONS: CAREERS, RETIREMENT, DYING

A paper to help counselors work with the aging

This manuscript is intended to be helpful to counselors working with clients of advanced age. Because death, dying, and aging are being brought more into focus with the advancing age of our population, these topics have come to the forefront in national counselor concerns. In addition, research has noted that these topics are the subject of a growing number of college courses. The ever-increasing number of early retirees is forcing counselors and persons in the social services to acquire skills and knowledge in the field. The manuscript was developed as a result of these factors, as well as the expression of high interest which was indicated in previous workshops conducted by ERIC/CAPS.

SUBJECT AREA(S)

This paper covers the rationale for selection of the topic; special considerations having to do with career counseling, client characteristics, and employer practices; counseling emphases, such as overcoming client diffidence, utilizing work skills and interests, developing new work skills and interests, and anticipating employer objections; retirement counseling, including attitudes and role adjustments, counseling emphases, the need for planning; dying and death, with special attention to terminal medical conditions, self-destructive behavior, and bereavement; and portents for the future.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for professionals in the social services who propose to assist, or are assisting, persons to make career changes, to plan and adjust to retirement, or to deal with death and dying.

GOAL(S) OR PURPOSE(S)

The goals are to bolster counselors' general knowledgeableness in this area and to delineate actual counseling techniques that have been proven to be effective with this age group.

MATERIALS AND EQUIPMENT

Monograph price has not yet been determined.

ASSURANCES AND CLAIMS

This monograph will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Daniel Sinick, Author

AVAILABILITY

Counseling Older Persons is currently being written. It will be available by December 1975 from:

ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:

ERIC Document Reproduction Service
Computer Microfilm International Corp.
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 004

DEVELOPING STUDENTS' POTENTIALS

A publication for helping professionals to develop student potentials

The greatest drain on the economy has been the ineffective utilization of resources. A major resource, too often neglected, is the human resource. Corporations, governmental agencies, and educational institutions have all witnessed the problem of helping their constituents to develop their full potential. The literature fails to provide comprehensive information and insights into programs that have been used to deal effectively with this problem. This publication focuses directly on the problem by providing the reader with three specific training programs that have been conducted in a number of different settings. Research concerning each program is provided, along with additional references for the interested reader. It is intended that this publication be helpful to the professional interested in developing students' potentials.

SUBJECT AREA(S)

Subject areas include achievement motivation, human potential groups, and eliminating self-defeating behaviors.

INTENDED USERS AND BENEFICIARIES

This publication is intended for school and college counselors, counselor educators and supervisors, school psychologists, counseling psychologists, directors of pupil and student personnel programs, and related professions.

GOAL(S) OR PURPOSE(S)

The purpose of this publication is to assist users in planning programs aimed at developing the potentials of students and other clientele.

MATERIALS AND EQUIPMENT

Publisher's cost is $5. ERIC microfiche cost is $0.75 plus $0.18 postage.

ASSURANCES AND CLAIMS

Developing Students' Potentials does not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

AVAILABILITY

Order No. ED 083 532, $0.75 (microfiche), add $0.18 (postage). Order from:
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Educational Resources Division
Capitol Publications, Inc.
Suite G-12
2430 Pennsylvania Ave. NW.
Washington, D.C. 20037

INFORMATION CURRENT AS OF MARCH 1975

RD 150 005

AN ACCOUNTABILITY MODEL FOR COUNSELORS: ERIC/TM REPORT 27

A paper describing accountability in counseling

A sound counselor accountability system would collate counselor accomplishments with costs. An accountability system would enable counselors to obtain feedback on the results of their work, select counseling methods on the basis of demonstrated success, identify students with unmet needs, devise shortcuts for routine operations, and argue for increased staffing to reach attainable goals. Better decisions could then be made about effective methods, staffing, student needs, and training. The system would define the domain of counselor responsibilities, use student behavior changes as evidence of counselor accomplishments, State counselor activities as costs, promote self-improvement, permit reports of failures and unknown outcomes, be designed by users, and be subject to revision. An illustrative accountability report shows how the cost, but not the value, of an outcome can be estimated. Experimentation is needed in order to answer the practical implementation problems of the system.

SUBJECT AREA(S)

The subject areas are counseling and accountability; specifically, the development of an accountability system for counselors.

INTENDED USERS AND BENEFICIARIES

This paper is written for counselors, school administrators, and others concerned with evaluating the effectiveness of counseling activities. The primary beneficiaries are counselors and school administrators who are interested in investigating the possibilities of implementing an accountability system for counseling and guidance activities.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to describe accountability in counseling—what it is, how it can be done, and the advantages and disadvantages of such a system. It is also designed to allay the apprehension of counselors toward accountability in counseling.

ASSURANCES AND CLAIMS

The initial manuscript for this paper was submitted to a number of experts in counseling and program evaluation. The author incorporated these comments and suggestions into a second draft which was reviewed in a similar manner. This second draft submitted for evaluation and critical review by a review panel of the *Personnel and Guidance Journal*. The final draft of this paper reflects their criticism.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

John D. Krumboltz, Author

AVAILABILITY

This paper appeared as an article in the June 1974 issue of the *Personnel and Guidance Journal* (pages 639-646). Reprints can be obtained from:

American Personnel and Guidance Association
1607 New Hampshire Ave. NW.
Washington, D.C. 20009

INFORMATION CURRENT AS OF MARCH 1975 ■

GUIDANCE AND COUNSELING

RD 150 006

NEW DESIGNS AND METHODS FOR DELIVERING HUMAN DEVELOPMENTAL SERVICE

A resource document for those who are planning to initiate or update their own program

The accent today is on accountability—whether program design responds to expressed need, which specific behaviors participants in a program may be expected to exhibit, how programs and people are to be evaluated, and how one trains staff to adopt and utilize new techniques and procedures. Scattered information exists in each of these areas, but this publication would be expected to bring all the information together in a usable form. It will be a "how-to" document from the standpoint of providing techniques and examples of needs-assessment strategies and procedures for training staff. It will also give an overview of existing competency-based pupil personnel services program, thus becoming a resource for those planning to initiate or update their own program.

SUBJECT AREA(S)

This document will cover needs-assessment strategies for guidance programs and staff development and training, and descriptions of competency-based guidance and pupil personnel services programs.

INTENDED USERS AND BENEFICIARIES

The primary users of this monograph will be counselors, student personnel workers, counselor educators, school administrators, teachers, and persons responsible for preservice and inservice training of school staff.

GOAL(S) OR PURPOSE(S)

The goals are to acquaint readers with exemplary competency-based guidance and pupil personnel services programs and to provide the reader with skills and know-how (including needs-assessment strategies and staff development and training techniques) to develop or upgrade their own guidance programs.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
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AVAILABILITY

This document will be available in September 1975 from:
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Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 007

PARAPROFESSIONALS IN HUMAN SERVICES

A monograph dealing with the use of paraprofessionals in educational and mental health settings

This is a 121-page monograph that deals with the use of paraprofessional workers in educational and mental health settings. The increasing use of paraprofessionals, and the hopes and conflicts that use precipitates, has created the need for a systematic examination of such use and its potential effects.

This monograph examines several positions regarding the use of paraprofessional help but takes no position itself. Rather, it was prepared to help counselors determine for themselves the impact of paraprofessionals on counselors' roles, as well as on the clientele they serve, by informing the reader of important issues and problems as they have been identified through research and existing practices.

SUBJECT AREA(S)

Topics covered by this monograph include: Historical and legislative developments; teacher aides; the role of the paraprofessional vis-a-vis that of the professional; paraprofessionals in mental health and pupil personnel services; guidelines for using paraprofessionals including selection, training, supervision, evaluation, and problems and dangers; and descriptions of programs using paraprofessionals.

INTENDED USERS AND BENEFICIARIES

While this monograph should be of general interest to counselors and related professionals, it is especially intended for those involved with programs using paraprofessionals, including counselors and paraprofessionals themselves; program directors, and those charged with program design and implementation, training of professional and paraprofessional workers, and program evaluation.

GOAL(S) OR PURPOSE(S)

The goals of this monograph are: (1) To help counselors determine for themselves the impact of paraprofessionals on their own roles and on their clientele, (2) to assist program developers in setting up guidelines for the use of paraprofessionals, and (3) to provide examples of how paraprofessionals have actually been used in a wide variety of settings.

MATERIALS AND EQUIPMENT

Hard, plastic bound copies from ERIC/CAPS cost $3. Microfiche copies from ERIC Document Reproduction Service (EDRS) cost $0.75 plus $0.18 postage. EDRS hard copy costs $5.40 plus $0.26 postage.

ASSURANCES AND CLAIMS

The monograph does not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

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AVAILABILITY

Order No. ED 096 600, $0.75 (microfiche), add $0.18 (postage); $5.40 (hard copy), add $0.26 (postage). Order from:

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Hard, plastic bound copies are also available from the developer for $3:

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2108 School of Education Building
University of Michigan
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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 008

PARENT EDUCATION AND ELEMENTARY COUNSELING

A description of several model programs in parent counseling

Elementary counselors are feeling an increasing need to work with parents to influence their children's development. Strong parent education and counseling models are being sought by the elementary counselor group nationally; the need for such a search is supported by elementary counselors, principals, and teachers. All of these groups have indicated their desire to initiate such programs and feel there is a need for a guide which would share parent education and counseling practices which others have developed that would help them design their own programs. This monograph is intended to fulfill this need. It is also felt that this monograph will provide needed support to the current trend toward increased parent involvement in the elementary education process.

SUBJECT AREA(S)

This monograph contains descriptions of several model programs in parent counseling. These descriptions are accompanied by sample booklists, outlines, letters, and handouts that have been used in these programs.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for elementary school counselors, teachers, and principals who are interested in developing parent education programs.

GOAL(S) OR PURPOSE(S)

The purposes of this monograph are: (1) To provide the elementary counselor and others who might be involved with parent education with basic information about several models of parent training and (2) to examine in depth some practical considerations which will be of assistance to counselors working in the field.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

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Jackie and Wesley Lamb, Authors

AVAILABILITY

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ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 009

WHAT'S HAPPENING IN COUNSELING IN U.S. FEDERAL PRISONS

An overview of the current status of counseling in the Federal and State prison systems

This monograph will cover the current status of counseling in Federal and State prisons, providing an overview of the situation as it exists today. In addition, it will speak to the techniques that are effective with juveniles, adults, women, blacks, and other groups within the larger groups of offenders. Very little literature exists regarding the situation within prisons at the present time, and little research is available concerning techniques and programs which are proving to be effective. This monograph will attempt to respond to this existing knowledge gap.

SUBJECT AREA(S)

This paper will cover the current state of counseling in penitentiaries, new approaches to assisting offenders to acquire greater awareness of their strengths and potentials, and approaches that are effective with various groups of offenders.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for counselors (especially prison counselors), parole officers, community and agency planners, and related professionals.

GOAL(S) OR PURPOSE(S)

The goal of this monograph is to provide practical help to counselors and other professionals in the areas of general information and specific strategies and techniques that are useful in working with prison inmates.

MATERIALS AND EQUIPMENT

The price of this product has not yet been determined.

ASSURANCES AND CLAIMS

This document will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

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AVAILABILITY

***What's Happening in Counseling in U.S. Federal Prisons* will be available in September 1975 from:**

ERIC/CAPS
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Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 010

IMPACT MAGAZINE

A bimonthly magazine promoting change and innovation in counseling and related professions

Impact is a magazine for change and innovation in counseling and related professions. Volume I (published 1971-72) consists of four issues, Volume II (1973-74) consists of six issues, and Volume III (1974-75) consists of six issues. Each issue focuses on a particular area of current interest to helping professionals and contains results of relevant research; descriptions of exemplary programs; a listing of current books, journals, and other resources of potential use to helping professionals; and full-length articles dealing with theories, programs, practices, and the state of the art.

This blend of information on theory, research, and practice is a response to the need for counselor awareness of and involvement in the latest developments relating to the helping professions. Reader input into *Impact* is encouraged and exposure is given to a wide variety of exemplary programs and practices in order to demonstrate how the fruits of theory and research can be operationalized in everyday practice. This approach is intended to stimulate more research and innovation by counselors in the field.

SUBJECT AREA(S)

The major subject areas covered by each issue of *Impact Magazine* are as follows:

Volume I, No. 1—Career guidance

Volume I, No. 2—Higher education, pupil personnel services, sex role attitudes, and counselor employment

Volume I, No. 3—Planning and implementing educational change

Volume I, No. 4—Drug education, achievement motivation, and "parenting"

Volume II, No. 1—Human development

Volume II, No. 2—Career guidance

Volume II, No. 3—Accountability in guidance

Volume II, Nos. 4 and 5—(One double issue) Sex therapy, roles, education, and homosexuality

Volume II, No. 6—Adolescence

Volume III, No. 1—Futuristics

Volume III, No. 2—Examining models, techniques, and programs in guidance

Volume III, Nos. 3 and 4—(One double issue) Career development

Volume III, No. 5—Paraprofessionals in the helping services

Volume III, No. 6—Counseling and the quality of life (to include articles on death and dying, counseling unmarried mothers, identity transformation in unmarried women, vocational counseling, a Delphi study of the future of the family, and college counseling programs for divorced or separated students).

INTENDED USERS AND BENEFICIARIES

Impact Magazine is intended for members of the helping professions. Specifically, this includes school counselors, counselor supervisors, counselor educators, school psychologists, teachers, and administrators. Although the usual emphasis is on counseling in educational settings, the magazine has some relevance to counseling psychologists and counselors in State and community agencies.

GOAL(S) OR PURPOSE(S)

The magazine is designed to keep counselors on the forefront of current developments in their profession. The ultimate goal is not only to inform, but also to stimulate, reader reaction to current trends and needs in counseling in the form of research and innovation at the "grassroots" level. The magazine addresses itself to high-priority topics, such as career education and sex role expectations, in order to sensitize readers to issues of national concern and explore ways in which counselors can respond to these concerns.

PATTERNS OF USE

The magazine is intended to be used as a practical guide and resource by counselors and related professionals.

MATERIALS AND EQUIPMENT

Subscriptions to current volumes of *Impact Magazine* cost $9 per volume. Individual issues from current volumes cost $1.50 for single issues and $3 for double issues. Individual issues from past volumes cost $1 for single issues and $2 for double issues.

ERIC microfiche copies are also available for $0.76, plus mailing.

ASSURANCES AND CLAIMS

The magazine frequently reprints statements that represent provocative, if not extreme, views as a means of sensitizing readers to important issues or developments that are relevant to the work of those with helping responsibilities. Occasionally, these statements may seem to contain political references or to have political connotations. It should be emphasized that neither by design nor intent does the magazine take stands on political issues or questions, or evaluate political figures. The basis for inclusion of items is determined solely upon the utility of the information for the performance of professional responsibilities and activities, and any attempt to draw inferences regarding political views is inappropriate and unwarranted.

Also, the magazine does not print any articles or statements that would perpetuate any social biases, including biases with regard to color, nationality, religion, sex, or personal belief.

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Garry R. Walz, Editor
Susan F. Kersch, Editor

AVAILABILITY

ERIC microfiche copies are available from:
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All issues of *Impact Magazine* are currently available (except volume III, No. 6, which will be available April 1975) from:
ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 150 011

SEARCHLIGHT

Sixteen annotated bibliographies on subject areas of importance to counselors

Searchlight consists of 16 annotated bibliographies. Each bibliography is derived from a computer search of the ERIC publications *Resources* (formerly *Research*) *in Education* (RIE) and *Current Index to Journals in Education* (CIJE), as well as *Dissertation Abstracts International*. Each *Searchlight* contains approximately 75-100 entries; and each entry includes title, author(s), length (in pages), availability, ERIC descriptors, and an annotation or abstract.

Searchlight is designed to provide counselors with convenient, low-cost packages of pertinent resources from the ERIC data base. All documents or journal articles cited are screened to insure their relevancy to the subject area covered by the issue in which they appear.

SUBJECT AREA(S)

Subject areas are school discipline and student rights, counseling the pregnant teenager, articulation, counseling for drug abuse, counseling for achievement motivation, improving counselors' public image, program evaluation and accountability, parent counseling, confidentiality, students as resources, counseling the aging, vocational counseling of disadvantaged students, support personnel, tests and testing programs, outreach counseling, and group guidance.

INTENDED USERS AND BENEFICIARIES

These bibliographies will be useful to counselors, counselor supervisors, counselor educators, and other pupil personnel workers. Counselors of college students and adults would also benefit from this series.

GOAL(S) OR PURPOSE(S)

This program provides counselors and other social professionals with convenient, low-cost bibliographies that cite resources which can be used: (1) To gather background information needed for program planning, design, implementation, and evaluation; (2) to assist counselors in the use of special instruments (such as standardized tests) or techniques (such as group counseling); (3) to help counselors recognize and respond to the needs of special populations; and (4) to sensitize counselors to issues of importance to their profession (such as confidentiality, the use of support personnel).

PATTERNS OF USE

Each *Searchlight* is a self-contained bibliography that may be used independently of the rest of the series. Each contains directions on how to obtain documents cited and an order form for ERIC microfiche copies.

MATERIALS AND EQUIPMENT

Searchlight, printed in September 1973, cost $1 each. Updated *Searchlight* (to be available by December 1975) will cost $1.50 each.

ASSURANCES AND CLAIMS

Only documents from the ERIC data base are included in *Searchlight*. Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the package causes an appropriately directed review of the materials. The materials are revised to eliminate such shortcomings.

DEVELOPER/AUTHOR:

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AVAILABILITY

***Searchlight* costs and order numbers can be obtained from:**

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available from the developer for $1 (issues printed in September 1973) or $1.50 (updated issues available December 1975):

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INFORMATION CURRENT AS OF MARCH 1975 ■

INFORMATION UTILIZATION AND DISSEMINATION

OVERVIEW

C. LARRY HUTCHINS and THOMAS D. CLEMENS
National Institute of Education
Washington, D.C.

History as prelude

One essential condition for continued, systematic improvement of education is for educators to acquire current, reliable information about effective practices and the results of research and development. This has been recognized by Congress for over a century, for the act establishing the Office of Education specified that one of the responsibilities of the new agency was ". . . diffusing such information respecting the organization and management of schools and school systems as shall aid the people of the United States in the establishment and maintenance of effective school systems and otherwise promote the cause of education throughout the country."

It was not until 1958, however, with the passage of the National Defense Education Act, that an explicit dissemination mandate was included in an authorization to support research and development. This mandate was incorporated in Title VII of that Act, authorizing the support of research and dissemination of information about such new and promising educational media as motion pictures, radio, and television. The title VII authorization resulted in the expenditure of millions of dollars for dissemination activities from 1958 through 1966. Thereafter, every new educational research authorization passed by Congress contained language encouraging the dissemination of the results of the research to be supported.

Perhaps the most significant of these expenditures was for a series of design and feasibility studies addressing the need for a research information service in the area of new educational media. Coupled with related work supported under the Cooperative Research Act, the result was the establishment in 1965 of the Educational Resources Information Center (ERIC), now the largest single educational information system in the world.

Yet despite the size of ERIC and the extensiveness of its use in education, it soon became apparent that mere access to documents about education was insufficient to facilitate continuous educational improvement. As a result, a variety of other types of dissemination activities were initiated. In 1965, under the provisions of the Vocational Education Act, the first of what was to become a national network of Research Coordinating Units was established in a State education agency. Although these units were intended to foster improved research about vocational education, they soon came to be a major dissemination link between the vocational educators of a State and the national knowledge base of results of research, development, and exemplary practice. Still another significant specialized dissemination service launched in the 1960's was a national network of instructional material centers to serve teachers of the handicapped.

During the same period, increasing emphasis was placed upon the interpretation and synthesis of the results of research and effective practice in order to provide educational practitioners with improved decisionmaking tools. At first, these efforts were carried on mainly in the ERIC clearinghouses; but beginning in 1967, grants and contracts were awarded to other applicants to provide interpretive materials on such subjects as: Remedial reading, bilingual education, and the year-round school. When this program was operating at full scale in the late sixties and early seventies, it resulted in a monthly publication called Putting Research Into Educational Practice (PREP).

In 1970 the initiation of a 3-year field experiment, the Pilot State Dissemination Program, demonstrated the importance of professional linking agents in assisting educators to acquire and use information in addressing educational problems. The experience of this program has since influenced most of the significant dissemination initiatives of the Federal Government. Among the offspring of the Pilot State Dissemination Program are the title III, ESEA facilitator network and the State Capacity Building Program of the National Institute of Education.

A broader concept

Throughout this historical period, dissemination in education was usually characterized as a process of spreading information about current practices, innovations, research and development products, and the like. Outcomes of this process were identified as awareness, knowledge, and evaluation activities that lead to decisions to adopt new practices. It was assumed that these decisions resulted in implementation and utilization activities that, in turn, solved problems and improved education.

This assumption and the role of dissemination in the educational change process are now being questioned. Policy statements, concept papers, research and development activities, and dissemination practice in recent years signal the recognition of the need for a broader definition. Local conditions and incentives for change, problems of implementation, need for technical assistance, requirements for local adaptation, and participation in the design of innovations have all become issues for those concerned with dissemination. As a result, *dissemination* is being more broadly redefined, or the word *utilization* or *implementation* is added to reflect a wider conception. This expanded definition of dissemination, or the concept of dissemination *and* utilization, encompasses the whole process of change in education particularly as viewed by those who wish to manage or influence the course of the change.

Dr. C. Larry Hutchins is the Chief, School Practice and Service Division, and Mr. Thomas D. Clemens is the Chief, Information and Communications Systems Division in the Dissemination and Resources Group of the National Institute of Education, Washington, D.C.

INFORMATION UTILIZATION AND DISSEMINATION

Trends

Trends in the field reflect this broader definition. Dissemination and utilization activities undertaken by State and intermediate service agencies are expanding to include attention to implementation and utilization activities, and R & D producers are adding technical assistance to the development and information services previously provided. Local education agencies are increasingly concerned with their own local problem-solving capability. Training programs for those trying to help local schools are moving away from their previous focus on skills related solely to the dissemination of information to those needed for change support. Research, development, and evaluation efforts are increasingly focused on what happens to an innovation after it is adopted. Finally, sponsors of change efforts at the Federal and State levels have demonstrated their awareness of the inadequacy of dissemination programs focused only on the spread of information about innovations and have pronounced the implementation/utilization component as critical to the total process.

Future R & D

New research and development will undoubtedly reinforce these trends. Work in a variety of areas is warranted. Undoubtedly, for example, efforts will continue to identify dissemination variables that influence the change process. A more urgent and difficult problem faces researchers in the discovery of how those variables already identified interact. For example, given knowledge (information) as a necessary condition of change, how much and what kind of information is needed at selected stages of change? Given the importance that previous research has placed on the role of personal, peer level communication in the change process, what are the most critical times for this type of information? What are the trade-offs between printed and audiovisual information? Given the need for linkage between resources and users, what forms of linkage are most successful under different constraints? These are but a few of the operational questions in need of further examination. It is possible that more fundamental, basic research on how people solve problems is also needed; but, given the severe institutional, legal, and fiscal constraints on the strategies available to help schools, it appears that field-oriented studies that examine multiple factors in the change process are likely to be most useful in the immediate future.

NIE products

The products identified in the Information Utilization and Dissemination section of the *Catalog* are but a few of those described elsewhere in the *Catalog* which are relevant to dissemination and utilization. For example, readers should also examine those products listed in the Finance, Productivity, and Management section, a number of which deal with organizational development issues that include a concern for information and the use of external resource systems. Others deal with interpersonal communication and staff development in ways that would be useful to those involved in dissemination. Other sections also contain descriptions of information products specifically focused on the topic area of the section.

In this section are information resources that are so general—such as the *ALERT, A Sourcebook of Elementary Curricula, Programs and Projects*—that they fit in no one particular subject area category or are specific to topics that have no separate section of their own—such as the *1974 Directory of Resources in Adult Education* and *Options and Perspectives: A Sourcebook of Innovative Foreign Language Programs in Action, K-12.* A number of the products included here describe information systems (e.g., *ERIC: What It Is, How To Use It; Community Use of the ERIC System; The Evaluation of Educational Information Centers).*

The bulk of products included, however, are training programs for dissemination and utilization personnel such as the 10-unit program of training for *Leadership in Local Educational Improvement Programs* or the *Educational Information Consultant (EIC) Training Program.* These products should be of unique interest to those involved in programs directed at linkages between other R & D products and school users. Also included are studies or reviews of how the change process is managed *(Diffusion Strategy Guide; Promoting Change in Schools, A Diffusion Casebook; Change Strategies and Techniques for the Helper;* and *Behavior of Innovative Personnel).*

Almost all of the products described in this section are for use by those who work in or with schools—administrators, information specialists, etc. Only one product, *The Library and Reference Skills Curriculum,* is oriented to students in grades 3 through 6. It should be examined in the context of some of the basic skills products, particularly those on reasoning, problem solving, or reading and language arts.

RD 160 001

ANALYZING AND IMPROVING THE IMPLEMENTATION OF A LOCAL EDUCATION PROGRAM (COMPONENT OF A 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

A self-instructional training unit
providing a problem-solving model on improving
the implementation of a local educational
program

Analyzing and Improving the Implementation of a Local Education Program is a training product designed to help school district leaders or consultants to school districts plan and conduct changes that will improve the effectiveness of implementation of any program being conducted in the district.

The product employs a problem-solving model consisting of five steps: Identifying features of the program being implemented, assessing the extent of present implementation of the features, conducting an analysis of likely causes for shortcomings in implementation, surveying resources that could be put to work in improving program implementation, and designing a plan for strengthening implementation. Several illustrative local programs are described and are the basis for student exercises.

The product is designed for study separately or together with any desired combination of other units of the training program. It is usable on a wholly self-instructional basis or with the direction of an instructor. An instructor's guide is provided for use with any of the program units. It is recommended that the student use unit 1 of the program, Training Program Introduction and General Study Plan Guide, as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change is the subject area.

This product is based on the recognition that the failures of school programs to accomplish intended outcomes very often reflect not faults in the program designs, but failures to achieve effective implementation. This is the case with both traditional and innovative programs. The product provides the educational leader with a procedure for identifying shortcomings of program implementation and for planning improvements in implementation.

INTENDED USERS AND BENEFICIARIES

This product is designed for use by anyone in education who offers full-time or part-time leadership in local educational improvement programs. Within school districts, this applies to associate or assistant superintendents for instruction, curriculum specialists, building principals, and teachers who are members of project teams. The product is suitable for use by field personnel of State education departments, regional educational laboratories, or private educational consulting firms in their work with school districts. It is appropriate for use in graduate course work in administration or supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of improving the implementation of ongoing programs, whether in curriculum, organization for instruction, school climate, school/community relations, or any other aspect of a school system.

PATTERNS OF USE

The product is a self-contained unit and is designed to be fully self-instructional. The student can restrict study to this 1 unit of the training program or can study any combination of the remaining units of the 10-unit program. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, Training Program Introduction and General Study Plan Guide, in deciding to study this and other program units. Also, the instructor can decide for the student that this product should be studied.

In studying the product, the student first takes the preassessment exercise to measure initial mastery of any unit objectives. On this basis, the decision is made as to which product objectives require review only and which require careful study. Following completion of the product, the student takes the postassessment exercise to determine whether mastery has been achieved or whether further study is needed.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 6 and 8 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Although this product can be studied on a self-instructional basis, it is usually expected that the product will be used in course work or an inservice workshop under an instructor.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program of which this is a component, Training Program Introduction and General Study Plan Guide, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $8. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $5 for *Analyzing and Improving the Implementation of Local Education Program* (which is unit 9 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional quality of the product, no instructional personnel are required. It is recommended, however, that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

The product is neutral with respect to any harmful or social biasing effects since it deals with leadership for improving local educational programs of any kind. All illustrative instructional programs described in the product involve innovations in instruction intended to improve individualization or to teach students to set their own goals and learn effective ways of achieving them. In user situations, no report having to do with any harmful or biasing effects of the product has been received.

Transportability of the product and its use independently of the producer are provided for in the design (fully self-instructional). In case the product is used with direction from an instructor, an instructor's guide is provided giving specific procedures the instructor may elect to follow in guiding students' work.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Analyzing and Improving the Implementation of a Local Education Program (1 volume)	1 per student	5.00	Consumable	

DEVELOPER/AUTHOR:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

**Glen Heathers, Project Director
John A. McAdams**

AVAILABILITY

The product is complete and in usable form. Further revision is needed to improve its qualities as a self-instructional learning module. The needed revisions of the product will be completed before November 1975. The distributor is:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 002

DIFFUSING EDUCATIONAL IMPROVEMENT PROGRAMS WITHIN A SCHOOL DISTRICT (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

A training product presenting theory and strategies for spreading the adoption of an innovative program within a school district

Diffusing Educational Improvement Programs Within a School District is a training product offering anyone with a specialty of leadership in local educational change programs a conceptual basis for planning to meet systemwide needs through improvement programs reaching into all parts of the system rather than being confined to a pilot level. The product is appropriate for study by school-system leaders or by field personnel of State education departments and consultants to school districts from any external educational agency.

The product identifies types of needs for improvement that are apt to be districtwide, considers reasons why successful pilot programs often fail to spread throughout the district, and examines and compares different strategies designed to yield districtwide improvement programs.

The product consists of a volume divided into 11 sections, each covering 1 objective. Exercises, several of which are based on descriptions of actual improvement programs, provide practice in applying the principles presented in the textual material. Answer keys are provided for the exercises. Preassessment and postassessment exercises with answer keys are included.

The product is designed to be studied separately or together with other selected units of the training program. It is usable on a self-instructional basis or under an instructor's guidance. An instructor's guide is provided for use with any of the program units. It is recommended that the student use unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change.

The product contributes to the designated knowledge and planning skills in offering leadership for achieving districtwide implementation of educational improvement programs. It gives particular attention to pilot test approaches to change, initial systemwide strategies for change, change programs where the same theme (e.g., individualizing instruction) is implemented systemwide, but with school-to-school variations, and change programs involving homemade products.

INTENDED USERS AND BENEFICIARIES

This component is intended for use by school-system leaders with responsibilities for planning and conducting local improvement programs, and for field consultants from State education departments, educational laboratories, or educational consulting firms. It is especially designed for anyone whose leadership specialty concerns planning to meet systemwide needs, including teachers who are members of change-project teams.

GOAL(S) OR PURPOSE(S)

The major purpose is to enable local agencies to plan more effectively for diffusion of any innovative educational program on a districtwide basis whenever appropriate.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program or can study any combination of the remaining nine program units. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide* in determining whether to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

RD 160 002

TIME REQUIREMENTS

Time required to complete the product varies between 4 and 8 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or in an inservice workshop under an instructor.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $8. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $5 for the present training product (which is unit 10 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is concerned with rational principles and procedures in offering leadership for any change program in local educational settings. This makes it neutral with respect to any form of harmful or social biasing effects.

Case descriptions included in the product have been carefully chosen to reflect a concern for meeting the needs of all categories of students through such means as providing for student choice of learning tasks, or an urban-suburban program providing spaces for urban black children in a suburban school system.

The product is designed to be fully self-contained and self-instructional; i.e., transportable and usable without assistance from the producer. If the product is used under an instructor's guidance, an instructor's guide is provided to offer specific recommendations and procedures for the product's use.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Diffusing Educational Improvement Programs Within a School District (1 volume)	1 per student	5.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
Lucretia J. Floor

AVAILABILITY

The product is complete and revision is not contemplated. It will be tested with school administrators.

Further evidence of the product's value will be obtained, either through expert judgment or user reactions, prior to November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 003

DIFFUSION STRATEGY GUIDE

A methodology for planning and managing the diffusion of innovations

This document presents a methodology for planning and managing the spread of educational innovations. It presents a diffusion paradigm which not only admits utilization of a consortium of State enforcement agencies as a disseminate mechanism through which research and development products may be diffused through established State enforcement agency channels, but also provides for a feedback mechanism through which the developers of research and development products can acquire both formative and summative evaluation data for educational practitioners. The guide is divided into two major divisions. The first division presents a theoretical framework of the concept, and the second division is devoted to a description of how to implement the methodology presented in the first division.

SUBJECT AREA(S)

The content of this document is exclusively concerned with the diffusion of the products of educational research and development.

INTENDED USERS AND BENEFICIARIES

The document is intended to contribute to the knowledge base of professionals engaged in diffusion of educational research and development products.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to present a methodology for diffusing research and development products and to assure, through the strategies projected, that the educational practitioner will have ample opportunity to affect the design of educational research and development products and processes.

PATTERNS OF USE

This document is sequenced in such a manner that it presents a step-by-step methodology for the diffusion of research and development products. It also provides the theoretical basis of the projected activities.

ASSESSMENT PROVISIONS

No provisions have been made for assessing the effectiveness of the implementation of this document.

TIME REQUIREMENTS

No time requirements have been established for the implementation of this document.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are required for implementation of the program; however, the assumption is made that those individuals implementing the guide will have had training and experience in the field of diffusion. The methodology set forth does require reorganization and redirection of established diffusion departments or mechanisms.

MATERIALS AND EQUIPMENT

No additional materials, equipment, or personnel are required for implementation.

ASSURANCES AND CLAIMS

The total methodology projected in the guide is supported only on a theoretical base. Many of the strategies and tactics proposed in this document have previously been implemented and found effective by the Appalachia Educational Laboratory (AEL) staff. As yet, the total process has not been implemented and tested.

DEVELOPER/AUTHOR:

Division of Diffusion
Appalachia Educational Laboratory, Inc.
P.O. Box 1348
Charleston, W. Va. 25325

AVAILABILITY

The *Diffusion Strategy Guide* was printed and disseminated to key people throughout the United States in November 1973. The first two printings of the document have been exhausted and copies are no longer available. However, the document is available through ERIC. There are currently no plans to revise or republish this document.

Order No. ED 090 919, $0.76 (microfiche), $5.70 (paper), add $0.34 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 004

THE EDUCATIONAL INFORMATION CONSULTANT (EIC) TRAINING PROGRAM

A team-learning program which explores methods of communicating research and development information to the education practitioner

The role of the Educational Information Consultant (EIC) is emerging in response to the need for information dissemination services in education. The EIC's role is to receive, process, and fulfill client requests for information needed to resolve specific curricular, instructional, and administrative problems. Various aspects of the EIC service have, in the past, been shared by a variety of professionals. It is becoming evident now, however, that there is an emerging need for a linkage agent—a person capable of standing between the research community and the educator, a person whose prime responsibility is to make research and development information available to the educator.

The instructional system in this training package has three qualities which, together, offer the student a learning experience quite different from the familiar ones. First, although the skills introduced relate directly to the emerging role of the EIC, they provide students with tools which can also be directly applied to their own research, retrieval, and utilization needs.

A second distinguishing quality is the opportunity the training provides for students to satisfy their own interests in a specific problem area. Each student takes another student's real information problem and attempts to resolve it while learning the processes composing the EIC role. This personal, student-to-student interaction in a real problem area typifies the idea of a server role, rather than the servee role frequently expected of students in the traditional instruction environment.

The training materials include checklists, concise "how-to-do-it" guidelines, and other job aids of proven utility for performing the EIC role. They are tools to do the job in the real world. The future reference value of these materials becomes apparent as they are presented, explained, and then applied during the training. The training program may be appropriately taken by educational personnel whose experience, interests, or work responsibilities may depend on a rich flow of timely, accessible educational information.

SUBJECT AREA(S)

Subject areas include communication, negotiating the educational problem, retrieval of information, transformation, and evaluation of outcomes.

INTENDED USERS AND BENEFICIARIES

Teachers, librarians, administrators, administrative aides, and others interested in obtaining new knowledge and materials are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of this package is: (1) To identify, define, and analyze an educational problem and attendant information need(s) of a client; (2) to develop a search strategy to locate, identify, and secure research and development information pertinent to the client's problem and request; (3) to screen, analyze, synthesize, and organize the results of the search into a form appropriate for delivery to the client; (4) to display and communicate the results of the search to the client in a style suitable for use in finding a solution to the problem; and (5) to assess the performance of the major EIC processes, overall role, and operational effectiveness of the setting within the linkage system, and then reformulate based on evaluation and adjustments made in processes and functions.

PATTERNS OF USE

Each one of the major processes is the focus of one unit, or module, of the training. In addition, there is an introduction module describing the emerging role and functional contexts of the EIC, and a simulation model providing an orientation to the skills involved in each process. The modules are introduced in a fixed sequence.

A learning-team form combines the concept of group dynamics with the already proven concept of independent study to create a unique, self-directed, small-team learning model. The basis for the learning-team form consists of self-instructional elements similar in content to those in the other two forms, but the directions are written to make the materials self-instructional. The schedule for this form calls for 10 team sessions and approximately 25 hours of individual activities. A team is composed of three to six persons.

ASSESSMENT PROVISIONS

Skills acquired are assessed by the instructor and by the student in a series of self-assessment exercises. An informational package, which is rated for congruence with a model package, is created and communicated by each student.

TIME REQUIREMENTS

The learning-team form requires approximately 60 hours, one-half of which is spent in individual study.

IMPLEMENTATION PROCEDURES

This package does not require a specialist teacher, although someone familiar with the Educational Resources Information Center (ERIC) will be much more effective. It is recommended that access to ERIC will greatly enhance the instructional experience. The instructor's manual contains complete and detailed lesson plans and assignments to make this package completely self-contained. The student's manual becomes a permanently useful reference and working measure.

Summary Cost Information

The cost of the learning-team form includes enrollment in a four-unit independent study course offered through the University of California Extension.

Personnel Required for Product Adoption and Implementation

Any instructor familiar with ERIC can implement this package.

ASSURANCES AND CLAIMS

Assurances

The information gathered from operational field tests of all 3 learning forms (course-4, institute-4, learning team-8) in 16 sites in 9 States indicates that the materials can stand alone in the hands of a competent instructor and can be successfully implemented without additional aid beyond that provided in the instructor's manual. The developers and publishers have not received any reports of harm associated with the use of this product.

The developer named the role "the EIC" to avoid any social bias or sexual stereotyping. All references are made to the "trainee," a "learner." There are no references to "he" or "she" in either student or instructor materials.

Claims

The accomplishment of almost every training objective is demonstrated by completion of a document or documents. The skills-oriented dimensions of the training prescribe that the learning exercises be actual operations which result in tangible trainee-produced products—an information package and "Paper Trail." In summary, 97 percent of the course and institute participants (N=144) completed the training and achieved basic skill level (2.0 on a 4-point scale) competence. Moreover, 74 percent of the course participants and 65 percent of the institute participants completed information packages that were rated at level 3.0 or 4.0, indicative of "Proficient" or "High Proficiency" levels of performance. Of the learning team participants who completed the training and submitted information packages (N=17), 89 percent completed packages that were rated at basic skill level, while 71 percent completed packages that were rated at the higher levels of proficiency. The raters were members of the staff of the developer agency trained for this particular task.

Careful attention to each stage of product development was given this training package. An adivsory committee was formed to establish the model of the EIC role and to define the functional elements to be included in it. A three-phase pilot testing occurred in the first development year, followed by extensive revision. Subsequently, the operational field testing established the effectiveness and transportability of the three learning forms.

The final report of the project in which this training was developed and validated is available.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Learning team form (enrollment in groups of 3)				
Learning materials including all instructions, exercises, readings, etc.	1 per student	65.00 per student plus 15.00 per learning team for A-V material	Consumable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Wayne E. Rosenoff, Project Director

AVAILABILITY

Order No. ED 071 689, $0.76 (microfiche), $5.70 (paper), add $0.26 (postgage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

This product is copyrighted by the Far West Laboratory for Educational Research and Development (1972) and can be ordered from:
University Extension
University of California
Berkeley, Calif. 94720

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 005

ENQUIRY AS AN EDUCATIONAL THEME (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

A training program offering a model for inquiry and examining innovations in terms of the model

Enquiry as an Educational Theme, With Related Innovations is a training product for use by anyone taking leadership in planning or conducting local educational improvement programs. The product is suitable especially for those in education who wish to have a conceptual basis for examining curriculum and instruction in terms of teaching all students inquiry or problem-solving competencies in any subject area. Graduate students in curriculum, supervision, or administration should benefit from study of the product. Within school systems, associate or assistant superintendents for instruction, curriculum coordinators, and department chairpersons may find the product particularly valuable. Building principals and teachers also are likely to find the product useful. Field consultants from State education departments or other agencies concerned with school improvement may find the product useful in their work with school districts.

The product defines and justifies inquiry as a critical type of learning goal, then presents a general model of inquiry or problem solving. Various curriculums designed to teach inquiry are then examined in terms of the model, and a checklist is provided for assessing the extent to which instruction in a school teaches inquiry. Numerous readings on the rationale for inquiry are included, along with descriptions of a number of innovative inquiry-focused curriculums.

The product consists of a volume divided into seven sections corresponding to product objectives. Exercises are included, each supplied with a worksheet and an answer key. The product contains a preassessment and a postassessment exercise, each with an answer key. The product is designed to be studied on a self-instructional basis or with assistance from an instructor. An instructor's guide is provided for use with the total training program or any part of it. The student may study only this product or study it together with other selected units of the training program. It is recommended that the student use unit 1, "Training Program Introduction and General Study Plan Guide," as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change.

The product contributes to the designated knowledge and skills in offering leadership for planning and conducting local educational improvement programs. It offers a rationale for inquiry-focused instruction to teach all students problem-solving competencies in acquiring and using knowledge in such areas as science and social studies. Through exercises, the student learns to employ the rationale in the examination of numerous inquiry-focused curriculums that are described in the product.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who offers leadership in planning and conducting local change programs. It is particularly well suited for study by curriculum specialists in school districts or teachers who are involved in change projects calling for teaching inquiry. Other school district leaders—associate superintendents for instruction and building principals—and community representatives can also benefit from study of the product. Field consultants from State education departments or other agencies serving schools may find the product useful in their work. Graduate students in curriculum, supervision, or administration can also benefit from study of the product.

GOAL(S) OR PURPOSE(S)

The purpose of the product is to help local educational agencies improve curriculum and instruction in teaching all students methods of inquiry to be employed in acquiring and applying knowledge in various subject areas.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program, or can study any combination of the remaining nine program units. The product can be studied alone or under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, "Training Program Introduction and General Study Plan Guide," in determining whether to study this and other program units.

RD 160 005

Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require review or more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 4 and 6 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or in an inservice workshop under an instructor.

The product has been used in various states of development in the following ways: As part of a training program offered field consultants of State education departments, as part of the training of doctoral students in curriculum and supervision, with field consultants of an educational laboratory, and with central administrators or building principals of school systems.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, "Training Program Introduction and General Study Plan Guide," of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $9. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $6 for the present training product (which is unit 5 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is concerned with principles and procedures in offering leadership for instructional change programs in local educational settings. This makes it essentially neutral with respect to any form of harmful or biasing effects. Expert critics of the product have not noted any features likely to produce such effects.

The product is designed to be fully self-contained and self-instructional; i.e., transportable and usable without assistance from the producer. If the product is used under an instructor's guidance, an instructor's guide is provided to offer specific recommendations and procedures for the product's use.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Enquiry as an Educational Theme, With Related Innovations (1 volume)	1 per student	6.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

AVAILABILITY

The product is in draft form. Revision is underway. The product will be complete and in usable form by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 006

INDIVIDUALIZATION, MASTERY, AND STUDENT SELF-DIRECTION AS THEMES OF EDUCATIONAL REFORM, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

A training product offering models for analysis of the three themes and examining innovations in terms of the model

Individualization, Mastery, and Student Self-Direction as Themes of Educational Reform, With Related Innovations is a training product dealing with three major, and closely related, themes of the present educational reform movement. It examines the extent to which various recent instructional innovations place these themes in operation. The product is designed for study by school system leaders with responsibility for planning and conducting change programs. It is also appropriate for field consultants from State education departments, graduate students in administration or supervision, and for teacher workshops.

The product identifies individualized instruction and discusses the contributions to individualization which can be made by ability grouping, nongrading, independent study, cooperative teaching, and the open classroom. Specific programs outlined in connection with these topics include Individually Guided Education (IGE), Program for Learning In Accordance with Needs (PLAN), and Individually Prescribed Instruction (IPI). The meaning and benefits of mastery and self-direction in contributing to individualization are also discussed.

This product is designed to be studied separately, or in conjunction with other units of the training program. It is usable on a self-instructional basis or with the direction of an instructor. An instructor's guide is provided for use with any of the program units. It is recommended that the student use unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, as one basis for selecting this particular product for study.

SUBJECT AREA(S)

Leadership in local educational change.

This product offers a 13-step set of objectives dealing with the definition and interrelationships of the themes of individualization, mastery, and student self-direction. It utilizes a number of specific programs as illustrations of individualized instruction and invites comparison of these programs in terms of the three main themes. The product also offers students the opportunity to utilize individualized learning, self-direction, and mastery in their study of the objectives.

INTENDED USERS AND BENEFICIARIES

This product is intended for use by anyone in education who is required to offer leadership, whether full time or part time, in local educational improvement programs. This includes school district leaders, central administrators, curriculum coordinators, building principals, teacher workshop participants, State education department field consultants, and graduate students in administration and supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of planning and conducting individualized programs in curriculum or organization for instruction.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program, or can study any combination of the remaining nine program units. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in determining whether to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 5 and 10 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or an inservice workshop under an instructor.

The product has been used in various states of development in the following ways: As part of the training of doctoral students in curriculum and supervision, with field consultants of an educational laboratory, and with central administrators or building principals of school systems.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $9. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $6 for the present training product (which is unit 4 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is concerned with rational principles and procedures in offering leadership for any change program in local educational settings. This makes it essentially neutral with respect to any form of biasing effects. In various user situations, no claim has been made of any harmful effects from study of the unit or from application of its contents.

A feature of the product's rationale and of the programs described in it is that they call for employing individualization, mastery, and self-direction with all students. Both the rational bases for the programs and the accumulated research evidence favor the judgment that they offer particular benefits in the form of enhancing positive self-concepts in slower learners and culturally different students.

While the product has not been used except with the producer's direction, the fact that it has been designed to be fully self-instructional insures that it is transportable for use in various settings independently of the producer.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Individualization, Mastery, and Student Self-Direction as Themes of Educational Reform, With Related Innovations (1 volume)	1 per student	6.00	Consumable	

Note: It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
Lucretia J. Floor

AVAILABILITY

The product is complete and will be available for use by November 1975 from the distributor:

Distributor:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 007

INSTRUCTOR'S GUIDE TO TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS (A 10-UNIT TRAINING PROGRAM)

Description of a 10-unit training program and how it can be used in planning and conducting instruction with educational leaders in different categories

Instructor's Guide to Training for Leadership in Local Educational Improvement Programs is a product designed to assist the instructor in helping students select units from the 10-unit training program and in guiding their study of the units selected.

The training program is intended for use by anyone taking leadership in the design and conduct of local educational improvement programs. Within school systems, this includes central office administrators and supervisors, building principals, and teachers who are members of change project teams. Outside school systems, such leadership may come from field consultants in State education departments or other educational agencies that serve local school districts. The training program is also suited for use by graduate students in curriculum, supervision, and administration.

The training program consists of an introductory unit, five units dealing with aspects of theory and procedures for planning and conducting local improvement programs, and four units dealing with key themes underlying many improvement programs: Individualization, mastery, student self-direction, problem-solving skills, personal/social development, and making schools relevant to students' needs.

This instructor's guide is designed to help the instructor make use of the training units in improving the competencies of educational personnel whose jobs call for leadership in local improvement programs. The instructor may be a university professor who is teaching graduate students or conducting workshops with school district personnel, a State education department official, a staff member of an agency such as a regional educational laboratory or private educational consulting firm, or an administrator in a school district.

This product offers the instructor a general orientation to the nature and purposes of the training program and offers procedures for assisting students in choosing and studying units of the program.

SUBJECT AREA(S)

Leadership in local educational change.

This product offers the instructor guidelines for assisting students in their work with units of the Training for Leadership in Local Educational Improvement Programs. The product introduces the instructor to the nature and contents of the training program and offers guidance in helping students select and study program units.

INTENDED USERS AND BENEFICIARIES

This product is designed for use by instructors conducting training of individuals or groups with use of selected units of the training program to which this instructor's guide refers. Users of the guide may be university professors, field personnel of State education departments or other educational agencies serving schools, or school system leaders conducting inservice workshops with other school system personnel.

GOAL(S) OR PURPOSE(S)

The purpose of the product is to help the instructor conduct training activities using units of the program to which this instructor's guide refers. The ultimate intent is that local educational agencies, through such training, improve their capabilities in planning and conducting significant improvement programs.

PATTERNS OF USE

This product is a self-contained unit for the instructor's use. It is recommended that the instructor also possess a copy of unit 1 of the 10-unit training program, *Training Program Introduction and General Study Plan Guide*, since each student is expected to use unit 1 in arriving at an individual study plan that makes use of some of the units of the training program.

The specific ways in which the instructor will use the guide depend on the purposes of instruction and on students, settings, and time for study. The guide allows for such flexibility in its use.

ASSESSMENT PROVISIONS

No provisions for assessing the value of the instructor's guide are included in the product. However, reports on use of the guide will be sought from instructors.

TIME REQUIREMENTS

Time required to become familiar with the content of the guide is 1 to 2 hours. In making use of the guide with students, time requirements will vary depending on how many students are involved. Probably not more than 1/2 hour of the instructor's time per student will be required in helping the student arrive at a study plan through use of unit 1 of the training program.

IMPLEMENTATION PROCEDURES

No problems of implementation are involved since this is a self-explanatory instructor's guide. It is desirable that the instructor use this guide while having a copy of unit 1 of the training program in hand. However, the instructor could make use of the student's copy of unit 1. Also, if the instructor is to work with different students who will be studying different units of the training program, it will be desirable for the instructor to have access to a complete set of units of the program.

Summary Cost Information

The given cost figures are estimates. For each instructor using this product in connection with unit 1 of the training program, the cost would be $5. Obtaining the full set of nine other units in the training program would cost approximately $50.

Personnel Required for Product Adoption and Implementation

Since the product is self-explanatory, no personnel are needed to teach the instructor how to use it.

ASSURANCES AND CLAIMS

This product is a guide for instructors' use in working with students who are using units in a training program on leadership for local educational change. There is no reason to believe that it could have any harmful effects. The product's contents are neutral with respect to any sort of biasing effects. The product is designed to be usable by the instructor without assistance from the producer. This transportability is enhanced by the fact that the training units are self-instructional, thus giving the instructor the option of working with students on a fully individualized basis or of teaching student groups in more conventional ways.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructor's Guide to Training for Leadership in Local Educational Improvement Programs (1 volume)	1 per student	2.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director

AVAILABILITY

The product is in draft form. Revision is underway. The product will be complete in usable form by November 1975 through the distributor:
Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

INFORMATION UTILIZATION
AND DISSEMINATION

RD 160 008

PERSONAL/SOCIAL DEVELOPMENT AS AN EDUCATIONAL THEME, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

A self-instructional training unit describing aspects of personal/social development and analyzing approaches to achieving these goals

Personal/Social Development as an Educational Theme, With Related Innovations is a training product offering anyone with responsibility for leadership in educational improvement programs, concepts, and principles for use in planning and conducting local change programs directed toward enhancing students' personal and social development. The product is appropriate for persons holding a variety of positions within education. In school systems, these include central administrators, department chairpersons, building principals, guidance counselors, and teachers who have roles in improvement programs. Field consultants in State education departments, educational laboratories, or private educational consulting firms can benefit from study of the product. Also, the product is suitable for study by graduate students in curriculum, supervision, or administration.

The product discusses the importance of personal/social development as an emphasis in the school program, and in successive objectives, treats self-concept, achievement motivation, interests, impulsiveness, self-direction, values, empathy, and interpersonal competencies. Various innovations related to promoting positive personal/social development are examined, e.g., mastery and individualization in relation to self-concept, behavior modification, achievement-competency training, and training teachers to work with inner-city children. A checklist for evaluating instruction in terms of personal/social development is included.

The product consists of a volume divided into sections according to 19 objectives. Pertinent literature is referred to or, in some instances, included in the product. Numerous exercises are presented, each supplied with a worksheet and an answer key. Also included are preassessment and postassessment exercises, together with answer keys.

The product can be studied separately or together with other units of the training program. It can be used on a self-instructional basis or under an instructor's guidance. A general instructor's guide for the training program as a whole is provided. It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change.

The product contributes to the designated knowledge and procedures of use by any person having responsibility for leadership in educational improvement programs directed toward furthering students' personal and social development. The product reviews goals of personal/social development and examines various innovations intended to improve the accomplishment of those goals.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who is called upon to offer full-time or part-time leadership in local educational improvement programs: School district leaders—central administrators, curriculum coordinators, building principals, and teacher members of project teams; field consultants from State education departments, educational laboratories, or private consulting firms; and graduate students in administration or supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of planning and conducting improvement programs in enhancing students' personal/social development.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program or can study any combination of the remaining nine program units. The product can also be studied under the direction of an instructor in a course or workshop.

INFORMATION UTILIZATION AND DISSEMINATION

RD 160 008

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in determining whether to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 6 and 10 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or an inservice workshop under an instructor.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $9. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $6 for the present training product (which is unit 6 of the training program).

ASSURANCES AND CLAIMS

This product is concerned with principles and procedures involved in offering leadership in planning local educational improvement programs directed toward students' sound personal and social development. Specific efforts have been made to insure that the product materials stress making provisions to meet the needs of all students in terms of their backgrounds and characteristics. Included are materials related to excluding bias in the form of sex typing. Also, stress is placed on provisions for meeting the needs of members of cultural minorities. Expert critics who have examined the product in the initial draft version have made no mention of possible harmful or biasing effects.

The product is designed to be fully self-contained and self-instructional; i.e., transportable and usable without assistance from the producer. If the product is used under an instructor's guidance, an instructor's guide is provided to offer specific recommendations and procedures for the product's use.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Personal/Social Development as an Educational Theme, With Related Innovations (1 volume)	1 per student	6.00	Consumable	

Note: It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director

AVAILABILITY

The product is in draft form. Revision is underway. The product will be complete and in usable form by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

PROMOTING CHANGE IN SCHOOLS, A DIFFUSION CASEBOOK

RD 160 009

Ten case studies of successful innovations

Promoting Change in Schools, A Diffusion Casebook contains reports that examine the histories of 10 products or programs. The focus is diffusion—the process by which an innovation reaches users—but the reports also examine product design and testing, since the actions taken at these stages can have a crucial impact on eventual market success. Programs or products included in the book cut across a number of dimensions that represent important clues to diffusion success or failure, possess a wide range of types and degrees of innovational complexity, and have been developed and distributed by various combinations of research and development agencies, other nonprofit agencies, and commercial firms.

The introduction presents tentative conclusions drawn from the studies, and calls attention to problems that have not been recognized early enough in all past efforts. The casebook tells a story of growing skill in working toward the adoption and implementation of innovative products. It points out that people who have developed and disseminated innovative educational products have learned that naive expectations will not be fulfilled; the proverbial "better mousetrap" does not sell itself. Instead of just developing and polishing a product and then hoping for the best, they are beginning to think of diffusion as a problem that deserves careful consideration at all stages of the development and dissemination process.

SUBJECT AREA(S)

Diffusion of educational products or programs is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users are funding agencies and developers and disseminators of educational programs.

GOAL(S) OR PURPOSE(S)

The major goals are to help fill a need in the diffusion literature for facts and inferences called from practical experience and to give advice to developers, disseminators, and funding agencies.

PATTERNS OF USE

The product includes a background and reference book.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Brenda J. Turnbull, Author
Lorraine I. Thorn, Author
C. L. Hutchins, Author

AVAILABILITY

Promoting Change in Schools, A Diffusion Casebook is available for $6.95 from the developer:
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 010

RELEVANCE AS AN EDUCATIONAL THEME, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

*A training program analyzing meanings of
relevance and examining various approaches to
achieving relevance in the school program*

Relevance as an Educational Theme, With Related Innovations is a training product designed for use by anyone having responsibility for leadership in local educational improvement programs to make instruction better suited to the needs, interests, and backgrounds of students. The product is especially appropriate for educators desiring a conceptual basis for examining curriculum and instruction in terms of provisions for insuring relevance. Within school systems, associate or assistant superintendents for instruction, building principals, and curriculum coordinators or department chairpersons are likely to find the product of value. Community members, especially those representing minority groups, are also apt to find the product useful. The product is well suited for study by graduate students in curriculum, supervision, or administration. Field consultants from State education departments and other education agencies may find the product useful in their work with school districts.

The product offers criteria of relevance and surveys common failures of schools to make instruction relevant generally for students and particularly for members of minority groups. Various means for improving relevance are reviewed: Student and community sharing in school decisionmaking, curriculum modifications, changes in instructional procedures, and alternative programs.

The product consists of a volume divided into 11 sections corresponding to product objectives. Key readings are included and are supplemented by references to the literature. The product can be studied on a self-instructional basis or with assistance from an instructor. Group discussion should follow study of the product. An instructor's guide is provided for use with this and other components of the training program. The student can study only this product or study it together with other selected units of the 10-unit training program. It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change.

This product contributes to the designated knowledge and skills in offering leadership in planning any local educational improvement program designed to increase the relevance of the school program to the needs and characteristics of students. The product presents criteria of relevance, reviews failures of most schools to make instruction relevant for students generally and, particularly, for members of minority groups. The means for improving the schools' relevance include curriculum changes, changes in instructional procedures, and changes in the learning climate of the school. The product gives attention to alternative programs as one way of improving relevance.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who is called upon to offer full-time or part-time leadership in local educational improvement programs: School district leaders—central administrators, curriculum coordinators, building principals, and teacher members of project teams; field consultants from State education departments, educational laboratories, or private consulting firms; and graduate students in administration and supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of planning and conducting improvement programs, whether in curriculum, organization for instruction, school climate, school/community relations, or any other aspect of a school system.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program, or can study any combination of the remaining nine program units. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in determining whether to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 5 and 10 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or an inservice workshop under an instructor.

The product has been used in various states of development in the following ways: As part of a training program offered field consultants of State education departments, as part of the training of doctoral students in curriculum and supervision, with field consultants or an educational laboratory, and with central administrators or building principals of school systems.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $9. Unit 1 is usable in planning study of any of units 2-10 of the program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $6 for the present training product (which is unit 7 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is designed specifically to train educational leaders to plan school improvement programs that are designed to meet the needs of all students with respect to their individual characteristics. As such, it gives particular attention to eliminating biasing effects related to instructing different categories of students, particularly members of minority groups. Eliminating sex typing in curriculum and instruction is one emphasis in the product materials. Expert critics who have examined the product in its initial version have not noted any likelihood of harmful or biasing effects.

The product is designed to be fully self-contained and self-instructional; i.e., transportable and usable without assistance from the producer. If the product is used under an instructor's guidance, an instructor's guide is provided to offer specific recommendations and procedures for the product's use.

RD 160 010

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Relevance as an Educational Theme, With Related Innovations (1 volume)	1 per student	6.00	Consumable	

Note: It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
James S. Johnson

AVAILABILITY

The product is in draft form. Revision is underway. The product will be complete and in usable form by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 011

SELECTING AN EDUCATIONAL IMPROVEMENT PROGRAM (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

*A self-instructional training unit providing
a six-step model of the process of selecting
an improvement program to meet local needs*

Selecting an Educational Improvement Program is a training product providing anyone with a specialty of leadership in local educational improvement programs a conceptual model for use in the process of helping school system personnel choose an improvement program that will meet their needs. School district personnel who may find study of the product of value include central office personnel, curriculum specialists, building principals, and teachers. Field consultants in State education departments or staff members of other educational agencies serving schools may also find the product valuable in their work. The product can also be useful for graduate students in administration or supervision.

The product is organized as a model for the process of selecting an improvement program that involves identifying needs for improvement, surveying resources that could meet these needs, analyzing local factors related to adopting different changes, and choosing the changes to be introduced in a way that takes account of needs, resources, and local assets or liabilities.

The product consists of a volume organized in terms of eight objectives. Case materials and associated exercises are included to give the student practice in applying the conceptual materials offered. Each exercise is supplied with an answer key. The product includes preassessment and postassessment exercises, together with answer keys. The product can be studied on a self-instructional basis or with assistance from an instructor. An instructor's guide is provided for use with this product and other units of the training program. The student can use this product separately or in combination with other selected units of the training program.

SUBJECT AREA(S)

Leadership in local educational change.

The product contributes to knowledge and skills required in offering leadership in planning and conducting any local educational improvement program. The product presents a 6-step model of the process of arriving at the choice of an improvement program. They are: Identifying the area where improvement is needed, specifying aims in the area, assessing shortcomings in accomplishing these aims, determining likely causes of the shortcomings, identifying resources that could remedy the shortcomings, surveying local factors favoring or opposing adoption of any desired resources, and selecting the improvement program to be adopted.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who offers full-time or part-time leadership in local educational improvement programs: School district leaders, central administrators, curriculum coordinators, building principals, teacher members of project teams; field consultants from State education departments, educational laboratories, or private consulting firms; and graduate students in administration or supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of planning improvement programs of any kind, including curriculum, organization for instruction, school climate, and school/community relations.

PATTERNS OF USE

The product is a self-contained unit and is designed to be fully self-instructional. The student can restrict study to this one unit of the training program or can study any combination of the remaining units of the 10-unit program. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in deciding to study this and other program units. Also, the instructor can decide for the student that this product should be studied. It is further recommended that the student first use unit 3 of the training program, "Task Flow for Designing and Conducting Local Educational Improvement Programs," since that unit covers the full process of planning and conducting improvement programs.

Selecting an improvement program is a part of this total process.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to the exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 4 and 6 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Although this product can be studied on a self-instructional basis, it is usually expected that the product will be used in course work or an inservice workshop under an instructor.

The product, in various stages of develoment, has been used in the following ways: (1) As part of a training program offered to field consultants of State education departments, (2) as part of the training of doctoral students in curriculum and supervision, (3) with field consultants of an educational laboratory, and (4) with central administrators or building principals of school systems.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide,* of which this is a component, at a cost of $3. Therefore, for each student using this product in connection with unit 1 of the training program, the cost would be $8. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $5, for *Selecting an Educational Improvement Program* (which is unit 8 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional quality of the product, no instructional personnel are required. It is recommended, however, that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

The product is concerned with rational principles and procedures in offering leadership for any change program in local educational settings. The case materials used in the product have been chosen to focus on meeting needs of inner-city students through such means as individualizing instruction and providing alternative programs. Nothing in the product can reasonably be expected to have any harmful or biasing effects.

Transportability of the product and its use independent of the producer are provided for by the design (i.e., fully self-instructional). In the event the product is used with direction from an instructor, an instructor's guide is provided giving specific procedures for using the product with students.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Selecting an Educational Improvement Program, single volume	1 per student	5.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
Beverly Loy Taylor

AVAILABILITY

The product is complete and in usable form. Prior to November 1975, data will be obtained from critics and/or users on the product's value. For information contact:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 012

TASK FLOW FOR DESIGNING AND CONDUCTING LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

*A self-instructional training product presenting
an 11-step task flow model for planning and
conducting a local improvement program*

Task Flow for Designing and Conducting Local Educational Improvement Programs is a training product offering anyone having a specialty of leadership in local educational change programs a general 11-step model to be employed in designing and conducting such programs. The product is appropriate for persons holding a variety of positions. Within school systems, these include central administrators, system-level curriculum coordinators, department chairpersons, building principals, or teachers who are members of project teams. Field consultants in State education departments, educational laboratories, or private educational consulting firms can benefit from study of the product. Also, it is suitable for use by graduate students in educational administration or supervision.

The product presents a model for problem solving in any type of situation within or outside education. The 11-step model for educational improvement programs covers the following: Local needs analysis, analysis of causes of shortcomings in meeting these needs, surveying resources that could meet the needs, selecting resources for inclusion in the improvement program, designing the program, implementing it, and evaluating its outcomes.

The product consists of a volume divided into 10 sections. Following presentation of the general problem-solving model, a detailed case study of the steps in planning and installing an actual middle school program is presented. Succeeding sections of the product present the steps of the task flow, with exercises based on the appropriate section of the case protocol. Each exercise has a worksheet and an answer key. Also included are preassessment and postassessment exercises with answer keys.

The product is designed to be studied separately or together with other selected units of the training program. It is usable on a self-instructional basis or under an instructor's guidance. A general instructor's guide for the training program as a whole is provided. It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, as one basis for selecting this product for study.

SUBJECT AREA(S)

Leadership in local educational change.

This product contributes to the designated knowledge and skills in offering leadership in planning and conducting local educational improvement programs. The product offers a general 11-step model of problem solving as a conceptual basis for the leadership tasks involved in change programs. Also, it offers practice in applying steps in the task flow to the analysis of case data on needs analysis, causal analysis, resources search, local constraints/supports analysis, change program selection and design, program implementation, and evaluation of program outcomes.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who is called upon to offer full-time or part-time leadership in local educational improvement programs: School district leaders—central administrators, curriculum coordinators, building principals, and teacher members of project teams; field consultants from State education departments, educational laboratories, or private consulting firms; and graduate students in administration and supervision.

GOAL(S) OR PURPOSE(S)

The goal of this product is to enable local educational agencies to do a more effective job of planning and conducting improvement programs, whether in curriculum, organization for instruction, school climate, school/community relations, or any other aspect of a school system.

PATTERNS OF USE

This product is a self-contained unit designed to be fully self-instructional. The student can restrict study to this one unit of the training program, or can study any combination of the remaining nine program units. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in determining whether to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

Before studying the unit, the student takes a preassessment exercise to measure initial mastery of any unit objectives. On the basis of the preassessment results, the decision is made regarding which unit objectives require either review or more intensive study. Following completion of the unit, the student takes the postassessment exercise to determine whether mastery of the objectives has been achieved or whether further study is required.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 6 and 10 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or in an inservice workshop under an instructor.

The product, in various stages of development, has been used in the following ways: As part of a training program offered to field consultants of State education departments, as part of the training of doctoral students in curriculum and supervision, with field consultants of an educational laboratory, and with central administrators or building principals of school systems.

Summary Cost Information

All cost figures given are estimates. It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3. Therefore, for each student using the product in connection with unit 1 of the training program, the cost would be $9. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $6 for the present training product (which is unit 3 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is concerned with rational principles and procedures in offering leadership for any change program in local educational settings. This makes it essentially neutral with respect to any form of social biasing effects. In various user situations, no claim has been made of any harmful effects from study of the unit or from application of its contents.

The case material used in the product involves a middle school in a predominantly black community. The described program emphasizes high community involvement, individualizing instruction, and enhancement of student self-image in the middle school described. The school was named after a black community leader.

The product is designed to be fully self-contained and self-instructional; i.e., transportable and usable without assistance from the producer. If the product is used under an instructor's guidance, an instructor's guide is provided to offer specific recommendations and procedures for the product's use. While the product can be used independently of guidance from its producers, this has not yet occurred.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Task Flow for Designing and Conducting Local Educational Improvement Programs (1 volume)	1 per student	6.00	Consumable	

Note: It is recommended that the student also purchase unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, of which this is a component, at a cost of $3.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director
Mary V. Brown

This product is complete and is in usable form. However, further revision taking into account user recommendations is planned. The product will be revised and in final form by November 1975. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

1205

RD 160 013

THEORY AND STRATEGIES OF LOCAL EDUCATIONAL IMPROVEMENT (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

Conceptual models providing bases for selecting, designing, and conducting any kind of local school improvement program

Theory and Strategies of Local Educational Improvement is a training product that provides a general conceptual basis for selecting, designing, and conducting various improvement programs in a school district. The product is especially suitable for use by graduate students in administration and supervision. School system leaders (central office personnel, building principals, and curriculum coordinators) can benefit from studying it. Also, it can be used by field consultants in State education departments or other educational agencies serving local school districts.

The product consists of a volume divided into sections according to product objectives. The role of theory in planning and conducting change programs is examined. Forces favoring and opposing change in school systems are surveyed. Various strategies for accomplishing needed changes are reviewed with particular attention to presenting guidelines for effective leadership in improvement programs.

The product can be studied separately or in conjunction with other units in the 10-unit training program. It can be studied on a wholly self-instructional basis or with direction from an instructor. An instructor's guide is provided for use with any of the program units. It is recommended that the student use unit 1 of the program, *Training Program Introduction and General Study Plan Guide*, as a basis for selecting this particular product for study.

SUBJECT AREA(S)

Leadership in local educational change.

This product contributes to knowledge basic to planning and conducting local educational improvement programs. Change theory is presented as a body of concepts and principles that can be applied to the design of effective change programs. Change strategies presented in the product include authoritarian versus participatory, product centered versus need centered, pilot versus total-system approaches, and the use of external versus internal leadership. Effective leadership in local improvement programs is considered in terms of working within local readinesses, offering expert assistance, and following rules of effective interpersonal relations and group processes.

INTENDED USERS AND BENEFICIARIES

The product is intended for use by anyone in education who is called upon to offer full-time or part-time leadership in local educational improvement programs: School district leaders—central administrators, curriculum coordinators, building principals, and teacher members of project teams; field consultants from State education departments, educational laboratories, or private consulting firms; and graduate students in administration or supervision.

GOAL(S) OR PURPOSE(S)

The goal of the product is to enable local educational agencies to do a more effective job of planning and conducting improvement programs, whether in curriculum, organization for instruction, school climate, school/community relations, or any other aspect of a school system.

PATTERNS OF USE

The product is a self-contained unit and is designed to be fully self-instructional. The student can restrict study to this 1 unit of the training program or can study any combination of the remaining units of the 10-unit program. The product can also be studied under the direction of an instructor in a course or workshop.

It is recommended that the student use unit 1, *Training Program Introduction and General Study Plan Guide*, in deciding to study this and other program units. Also, the instructor can decide whether this product should be studied by the student.

In studying the product, the student first takes the preassessment exercise to measure initial mastery of any unit objectives. On this basis, the decision is made as to which product objectives require review only and which require careful study. Following completion of the product, the student takes the postassessment exercise to determine whether mastery has been achieved or whether further study is needed.

ASSESSMENT PROVISIONS

Preassessment and postassessment exercises, with answer keys, give bases for planning study of the product and for assessing terminal mastery. Throughout study of the product, the student uses the answer keys to exercises in checking progress.

TIME REQUIREMENTS

Time required to complete the product varies between 4 and 8 hours, depending on how intensively the student needs to work on product objectives.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or in an inservice workshop under an instructor.

Summary Cost Information

All cost figures given are estimates. For each student using this product in connection with unit 1 of the training program, the cost would be $8. Unit 1 is usable in planning study of any of units 2-10 of the training program, so the cost of this would not need to be duplicated if the student used additional units of the program. The cost per instructor would be $2 for the instructor's guide, $3 for unit 1, and $5 for the present training product (which is unit 2 of the training program).

Personnel Required for Product Adoption and Implementation

In view of the self-instructional features of the product, no instructional personnel are required. However, it is recommended that there be an instructor to help students select the product for study, to assist them while studying the product, and to help evaluate mastery of product objectives.

ASSURANCES AND CLAIMS

This product is concerned with rational principles and procedures involved in offering leadership in any local educational improvement program. This makes it essentially neutral with respect to any harmful or biasing effects. Expert critics who have examined the product in the initial draft version have not found likelihood of such effects.

The product is designed to be transportable and usable without assistance from the producer. However, such use has not yet been made of the product.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Theory and Strategies of Local Educational Improvement (1 volume)	1 per student	5.00	Consumable	

DEVELOPER/AUTHOR:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

Glen Heathers, Project Director

AVAILABILITY

The product is in draft form. Revision is underway. The product will be complete and in usable form by November 1975. Order from:

**Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 014

TRAINING PROGRAM INSTRUCTION AND GENERAL STUDY PLAN GUIDE (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)

Self-instructional training unit on types of
local change programs and leadership roles
in such programs

Training Program Introduction and General Study Plan Guide is a training product offering anyone having a specialty in leadership in local educational change programs an introduction to the full training program and a procedure for deciding which of units 2-10 of the program are to be studied.

The training program is intended for persons holding a variety of positions in school systems or in educational agencies serving school systems. This product should be studied first by anyone who can benefit from study of any of the remaining nine units. This includes, within a school system, central office administrators and supervisors, building principals, and teachers involved in planning or conducting any sort of change program. School board members and community representatives also may find some program units of value in their leadership roles. The program is also appropriate for use by field consultants of State education departments and other educational agencies serving schools. Finally, graduate students in curriculum, administration, and supervision can study selected program units with profit.

This product consists of a volume divided into two main sections. The first section reviews the purposes and nature of the training program under five objectives: Reviewing types of local change programs, identifying common shortcomings of such programs, surveying positions calling for leadership in local educational improvement, outlining qualifications for a specialty of leadership in local change programs, and outlining needs for training for such a specialty. The second section describes briefly the remaining nine units of the training program and offers the student a specific procedure for deciding which units are to be studied.

This product can be used on a self-instructional basis or with an instructor's assistance. A general instructor's guide for the training program as a whole is provided. It is recommended that all students use this product as the basis for deciding which of the program units will be studied.

SUBJECT AREA(S)

Leadership in local educational change.

This product offers a survey of types of local educational improvement programs, then examines positions and roles of educators having responsibility for leadership in planning and conducting such programs. It also offers a planning guide that describes units of the training program introduced by the product and gives the student a procedure for deciding which of the units are to be included in the study plan. The units from which a selection is to be made cover the following topics:

(1) Theory and strategies of local educational improvement programs;

(2) Task flow for designing and conducting local improvement programs;

(3) Individualization, mastery, and student self-direction in instruction

Inquiry as an instructional theme,
Personal/social development as a theme in instruction,
Relevance as an instructional theme,
Selecting an educational improvement program,
Improving the implementation of a local educational program; and

(4) Diffusing educational improvement programs within a school system.

INTENDED USERS AND BENEFICIARIES

This product is intended to be used as an introduction to the training program by anyone in education who offers full-time or part-time leadership in local educational improvement programs. In school districts, this means central administrators, curriculum coordinators, building principals, and teacher members of project teams. Field consultants from State education departments or other educational agencies serving schools will probably find study of this product valuable in deciding which of the training units they or their clients should study. The product will also be valuable to graduate students in curriculum, administration, and supervision as an orientation to the training program and as a guide to planning use of any units in the program.

GOAL(S) OR PURPOSE(S)

This product has been designed to guide educational personnel in undertaking training activities that will contribute toward more effective improvement programs in school systems, whether those programs are in curriculum, instructional procedures, organization for instruction, school/community relations, or any other aspect of a school system.

PATTERNS OF USE

This product is a self-contained unit and is designed to be fully self-instructional. Since this product introduces the remaining nine units of the training program, it is assumed that its function will be that of aiding the student in selecting other units for study. If the student has an instructor, this product normally would be studied under the instructor's direction.

In studying the product, the student reads the first part and performs the exercises it includes. The student then follows the procedures described in the general study plan guide in arriving at a choice of units of the training program that are to be studied.

ASSESSMENT PROVISIONS

Since this product is an introduction to the training program, no assessment materials are included other than the student's self-assessment of training needs.

TIME REQUIREMENTS

Time required to complete the product varies between 2 and 4 hours, depending on how intensively the student elects to study the product.

IMPLEMENTATION PROCEDURES

Since the product can be studied on a fully self-instructional basis, the student can use it without instructional help. Normally, it is expected that the product will be used in course work or an inservice workshop under an instructor.

Summary Cost Information

The cost figures given are estimates. Each student should use this product in combination with one or more of units 2-10 of the training program. The cost to the student would then be $3 for this product plus the cost of additional units chosen. It is recommended that the instructor, if there is one, purchase this product and the program's instructor's guide at a cost of $2, or a total cost of $5.

Personnel Required for Product Adoption and Implementation

In view of the self-instructional nature of the product, no instructional personnel are required. It is recommended, however, that there be an instructor to help students survey types of change programs, types of leadership positions involved in local change programs, and qualifications for filling such positions. Also, the instructor should help the student examine the descriptions of units in the training program and to decide which units to study.

ASSURANCES AND CLAIMS

This product describes local school improvement programs and offers the individual student a planning guide for deciding which of nine training units are to be studied. There is no reason to expect any harmful or biasing effects. None of those who have used the product in an earlier version has noted any such potential effects.

The product is designed to be transportable and usable either on a fully self-instructional basis or with assistance from an instructor. However, it has not yet been used independently of the producer's guidance.

RD 160 014

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Training Program Introduction and General Study Plan (1 volume)	1 per student	3.00	Consumable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Glen Heathers, Project Director

AVAILABILITY

The product is complete and is in usable form. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 015

ALERT, A SOURCEBOOK OF ELEMENTARY CURRICULA, PROGRAMS, AND PROJECTS

A selected sample of curriculums, training programs, model projects, and resources for use in elementary education

ALERT, a Sourcebook of Elementary Curricula, Programs, and Projects provides information on a selected sample of curriculums, training programs, model projects, and resources for use in elementary education. Approximately 300 reports cover programs from a number of fields, including aesthetics and the arts, career education, drug education, early childhood education, environmental education, ethnic education, foreign-language arts, reading science, social studies, and mathematics. Each report is presented in a very readable format. First, a concise introductory section provides general information. Then, using an outline format, information is provided on such subjects as target audience, content emphasis, project goals, length of use, unit sequencing, instructional method, teacher's role and training, and program evaluation. Finally, a quick reference chart spells out the items required for the program, quantities needed, cost per item, and replacement rate. Each report follows the same format so that a reader can easily compare the merits of different programs.

SUBJECT AREA(S)

This sourcebook is concerned with elementary curriculums, programs, and projects.

INTENDED USERS AND BENEFICIARIES

School personnel responsible for selecting instructional programs constitute the primary target audience of ALERT. The catalog is also used in preservice and inservice teacher education and by teachers and others who are interested in learning about curriculum alternatives.

GOAL(S) OR PURPOSE(S)

The ALERT information system was conceptualized as a vehicle to increase school personnel awareness, understanding, and decision-oriented evaluation of new educational programs. The concern has been with disseminating information about the newer, empirically based educational developments, those that have been tested and demonstrated to be effective. It is designed to facilitate and improve curriculum decisionmaking, inservice training, preservice education, staff involvement, community participation, and public information.

PATTERNS OF USE

ALERT is used as a reference book by people who are looking for concise descriptions of elementary curriculum materials.

ASSURANCES AND CLAIMS

Results of a 2-year main field test indicate that users increased their knowledge of curriculum materials (increase in knowledge, however, did not meet developers' stringent standards), were able to compare and contrast programs, and could apply ALERT information to their own needs. Although the information contributed to decisionmaking, it in itself did not provide an adequate basis for making adoption/rejection decisions. Potential adopters need to personally examine the materials, talk to teachers who have used the programs, or see them in action. Responses to questions designed to elicit a general evaluation of ALERT were always highly favorable. All of the subjects in the sample felt the product was valuable and expressed a willingness to use it or recommend its use in the future.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Samuel N. Henrie, Senior Editor

AVAILABILITY

Released January 1973, *ALERT, a Sourcebook of Elementary Curricula, Programs, and Projects* is available for $9.95. A directory to the ALERT sourcebook, listing sites where ALERT curriculum materials are being used is also available for $2.45. Both can be ordered from:

Docent Corp.
25 Broadway
Pleasantville, N.Y. 10570

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 016

BEHAVIOR OF INNOVATIVE PERSONNEL

A paper discussing characteristics of innovative educational personnel

This paper is devoted to a discussion of characteristics of innovative educational personnel and factors, such as the educational institution, that may affect innovative actions. The paper is divided into three sections. Section 1 presents a literature review that centers on three categories: Leadership, qualities of innovativeness, and change agents. Section 2 discusses the school as a setting for innovation under topics such as the social context of the school, the structure and function of the school, and the roles of persons in the school setting. Section 3 speculates upon the behaviors most appropriate to school persons who are or might be considered to be innovative. Several broad categories of behavior are identified.

SUBJECT AREA(S)

Subject areas include innovative personnel and factors contributing to their development and training.

INTENDED USERS AND BENEFICIARIES

Teacher trainers in all educational settings and also those responsible for inservice education are the intended users of this paper. Teacher trainers would be provided with performance objectives derived from a study of the characteristics of educational personnel who have demonstrated an ability to develop innovative techniques.

GOAL(S) OR PURPOSE(S)

The goal of this paper is to strengthen the knowledge base with regard to the characteristics of innovative personnel and the development of these characteristics.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle, NW., Suite 616
Washington, D.C. 20036

Gary A. Griffin, Author
Ann Lieberman, Author

AVAILABILITY

Order No. ED 093 857, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 160 017

COMMUNITY USE OF THE ERIC SYSTEM: INFORMATION PACKAGES

A set of packages to familiarize community groups with the ERIC information system

The *Community Use of the ERIC System* (CUES) project will develop two information packages, one for use by lay persons in local communities who influence educational decisionmaking and the other for use by ERIC collection holders. The purpose of the packages will be to assist these two groups in locating and using ERIC documents related to local educational problems.

The first package will be designed for such groups as boards of education, PTA's, persons running for or holding public office, citizen advisory committees, city council members, and others who are particularly concerned with school policy and decisionmaking. This package will contain guidelines and materials to teach this target audience to use the ERIC system for gathering information pertinent to their particular problems. The tentative items for the package include: Set of guidelines on how to use the ERIC system; selected abstracts on specific topics (e.g., busing/integration, cable television, accountability, bilingual education, and textbook selection); microfiche of a smaller number of documents on topics of interest to laypersons; selected bibliography of non-ERIC documents on such topics; guidelines on how to use the documents for educational problem solving; and information on how to find additional documents in ERIC.

The second package, for ERIC clearinghouses and other ERIC collection holders, will provide guidelines for assisting collection holders in directly serving the lay groups involved with education in their communities. The tentative items for the package include: Guidelines on how to assess the local community's educational problems, specific steps for collection holders to take to contact community groups, descriptions on how to conduct workshops for local groups, and an annotated bibliography on educational problem solving for use by community groups.

SUBJECT AREA(S)

Busing/integration, cable TV, accountability, bilingual education, textbook selection, censorship, and other local educational problems to be identified are the subject areas.

INTENDED USERS AND BENEFICIARIES

The first information package is intended for lay persons who are involved in educational decisionmaking at the community level. Such people include boards of education, PTA's, persons running for or holding public office, citizen advisory committees, and city council members.

The second information package will assist ERIC standing order customers in helping the various community groups.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Christine Ahrens, Author
Regina McCormick, Author

AVAILABILITY

The information packages will be available November 1975, and can be ordered from:
Social Science Education Consortium
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

1213

RD 160 018

CHANGE STRATEGIES AND TECHNIQUES FOR THE HELPER

An overview of the process of planned change

This monograph is designed to familiarize the reader with the process of planned change. Both the theory and practical aspects of introducing change into an existing system will be dealt with. Counselors will be introduced to a variety of useful techniques for introducing and implementing change within their own settings. The monograph was developed as a result of the extensive interest shown by participants at the 1973 and 1974 career development workshops sponsored by ERIC/CAPS in Ann Arbor.

SUBJECT AREA(S)

This publication will include information of change theory, specific steps and procedures that a person can use to effect change, and the importance of strategies for future change.

INTENDED USERS AND BENEFICIARIES

This monograph is intended for counselors and related professionals.

GOAL(S) OR PURPOSE(S)

The goal of this monograph is to provide counselors with the knowledge and skills they need to effect change in their own settings.

MATERIALS AND EQUIPMENT

The cost of this monograph has not yet been determined.

ASSURANCES AND CLAIMS

This monograph will not perpetuate sexism, racism, or other biases such as those related to religion, age, or socioeconomic stereotypes.

DEVELOPER/AUTHOR:

ERIC Counseling and Personnel Services Information Center
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Ronald Havelock, Author

AVAILABILITY

Change Strategies and Techniques for the Helper will be available August 1975 from:

ERIC/CAPS
2108 School of Education Building
University of Michigan
Ann Arbor, Mich. 48104

Shortly after publication, ERIC microfiche and paper copies will be available from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 019

ERIC: WHAT IT IS, HOW TO USE IT

*A kit for individual or group training in use
of the ERIC system*

ERIC: What It Is, How To Use It introduces the Educational Resources Information Center (ERIC) to a variety of users. The primary purpose of the kit is to actively involve the user in learning about ERIC and its search tools. The kit has been designed for use with large or small groups or for self-instruction.

Providing the necessary materials and instructions for use, the kit includes: (1) Three filmstrip-cassettes that present, first, an overview of the ERIC system and, second, depending on the user, a focus on various aspects of an ERIC search; (2) easily reproducible mockups of the three main ERIC search documents, the *Thesaurus of ERIC Descriptors, Research in Education* (RIE), and the *Current Index to Journals in Education* (CIJE); (3) worksheets to assist the user in learning about ERIC procedures; and (4) a coordinator's manual that gives instructions on using the various kit components.

Since there is a variety of client groups who can use the ERIC system, the kit contains three levels of activities. Each level seeks to develop a greater degree of sophistication in the use of ERIC. The levels are: Level 1, An Introduction to ERIC; Level 2, Learning To Use *Research in Education*; and Level 3, Doing an ERIC Search.

SUBJECT AREA(S)

The subject area is Educational Resources Information Center; specifically, how to use the ERIC system.

INTENDED USERS AND BENEFICIARIES

A variety of groups can find this kit useful: ERIC clearinghouse visitors, librarians, undergraduate college instructors, community college instructors, graduate college instructors, high school students, undergraduate students, graduate students, school faculties, nontraditional educators, school administrators, professional organization memberships, government agency employees (Federal, State, and local levels), researchers, information specialists, and information retailers.

GOAL(S) OR PURPOSE(S)

For level 1, the specific objectives are to become aware of the ERIC resources and to know in general what ERIC is and how the ERIC system works.

For level 2, the specific objectives are: (1) To become aware of the kinds of educational problems for which ERIC can provide information; (2) to know how the primary ERIC search tool, *Resources in Education*, is organized and used; and (3) to gain skill in searching *Resources in Education* by doing a modified search.

For level 3, the specific objectives are: (1) To know how to use the three main ERIC search tools—*Thesaurus of ERIC Descriptors, Resources in Education*, and *Current Index to Journals in Education*; (2) to acquire skill in developing problem statements; (3) to gain skill in conducting an ERIC search by doing a modified search; and (4) to become aware of the kinds of educational problems for which ERIC provides information.

PATTERNS OF USE

The levels may be used in any order; however, it is desirable that level 1 precede the use of levels 2 and 3. Each level may be used independently. It is not suggested that levels 2 and 3 be used together.

ASSESSMENT PROVISIONS

There are no evaluation provisions made.

TIME REQUIREMENTS

Level 1 takes from 15 to 30 minutes to complete. The time for showing level 1 includes distribution of a handout on the ERIC system and response to questions.

Level 2 takes from 30 to 45 minutes to complete. Level 2 contains a search activity that lasts 15 to 30 minutes, depending on group size. The remaining time allows for questions and answers.

Level 3 takes from 60 to 75 minutes to complete. There are four stop sessions in level 3. Depending on group size, the stop-session activities will last approximately 1 hour and the remaining minutes can be used for group discussion.

IMPLEMENTATION PROCEDURES

The filmstrips and cassettes in the kit can be used on any standard filmstrip projector and cassette recorder. The automatic synchronization on the cassette was designed to be used with Sony equipment. It is useful if tables and chairs are provided rather than armchair desks so that participants can work on search problems.

ASSURANCES AND CLAIMS

All three levels of each kit were tested with over 1,000 individuals. Results indicate that the objectives, as stated above, were reached by more than 70 percent of the field test individuals who participated. Revisions were made in the kit based on feedback from field test participants. The kit has not been retested following revision.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

James E. Davis, Project Director

AVAILABILITY

The kit is currently available free of charge to ERIC standing order customers from:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Standing order customers must request the kit in writing. The kit is also available from the developer at a cost of $35. Order from:

National Audiovisual Center
Bethesda, Md. 20014

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 020

THE EVALUATION OF EDUCATIONAL INFORMATION CENTERS: ERIC/TM REPORT 34

An overview of strategies for assessing educational information centers

Educational information centers are agencies which provide a broad range of search, information retrieval, and dissemination services. They are primarily concerned with providing increased and more effective communication of the results of research and development in education and related areas to educational decisionmakers and practitioners. Educational information centers generally are characterized by a heavy reliance on the ERIC (Educational Resources Information Center) data base, supplemented by locally acquired additional materials. Strategies for evaluating these centers can be developed in terms of client needs, information resources, the search and retrieval process, the impact and utilization of information by clients, and cost effectiveness.

SUBJECT AREA(S)

This manuscript discusses program evaluation and information dissemination.

INTENDED USERS AND BENEFICIARIES

The primary beneficiaries are administrators of educational information centers. A secondary audience consists of information dissemination specialists at the State, local, and Federal levels.

GOAL(S) OR PURPOSE(S)

The purpose of this program is to present a basic discussion of the issues and procedures involved in the evaluation of an educational information center.

ASSURANCES AND CLAIMS

The initial manuscript was submitted to a number of measurement experts for review. The authors incorporated these comments and suggestions into a second draft which was reviewed in a similar manner.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

Richard R. Brickley, Author
Carolyn V. Trohoski, Author

AVAILABILITY

Order No. ED 099 424, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

Copies are also available without charge from ERIC/TM, as long as supplies last. Request document number TM 004 302.
ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, N.J. 08540

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 021

1974 DIRECTORY OF RESOURCES IN ADULT EDUCATION

A compendium of adult education associations, periodicals, data bases, and data retrieval systems

This product is a directory of: (1) National adult education associations, (2) adult education periodicals, (3) information systems, (4) information search services, (5) other resources, (6) graduate programs of adult education, and (7) classical adult education source documents.

SUBJECT AREA(S)

Adult and continuing education.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are persons in adult and continuing education.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to give an otherwise highly diverse field a directory of its primary resources.

DEVELOPER/AUTHOR:

ERIC Clearinghouse in Career Education
Northern Illinois University
204 Gabel Hall
De Kalb, Ill. 60115

Stanley M. Grabowski, Coauthor
Ann C. Glenn, Coauthor

AVAILABILITY

Order No. ED 097 413, $0.76 (microfiche), $6.97 (paper), add $0.30 (postage). Order from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 160 022

OPTIONS AND PERSPECTIVES: A SOURCEBOOK OF INNOVATIVE FOREIGN LANGUAGE PROGRAMS IN ACTION, K-12

A survey of 50 successful experiments in foreign language instruction

This 382-page paperbound guide surveys more than 50 successful experiments in foreign language instruction, many validated by followup studies and research-based evaluation. The book presents information on current innovative foreign language projects and programs for grades K to 12. Its intent is to provide information, not to mandate or promote change.

The project entailed the collecting, selecting, organizing, analyzing, and reporting of information. Some programs required extensive coverage; less complex programs were reported in shorter fashion. Long reports are generally organized into sections on such topics as: Overview of the program, program development and present status, target audience, program goals and/or goals for students, student grouping and scheduling arrangements, methodology and representative content, credit and articulation, materials and facilities, roles of teachers and other personnel, training requirements, role of community, program evaluation, funding and costs, adaptability of concept to other places, available descriptions, and contact person.

SUBJECT AREA(S)

Foreign languages (grades K to 12).

INTENDED USERS AND BENEFICIARIES

Individual teachers, schools, and/or school districts; trainers of foreign language teachers, and foreign language coordinators are the intended users.

GOAL(S) OR PURPOSE(S)

The goals are: (1) To provide teachers and other school personnel with sufficiently detailed information about specific programs so as to permit administrators and teachers to decide whether the ideas are adaptable to their own situations, (2) to stimulate administrators and teachers to organize programs of their own design, (3) to provide examples that demonstrate the feasibility of changing foreign language programs, and (4) to provide new ideas for use and adaptation of commercial materials or for creation of one's own materials.

To provide trainers of teachers with: (1) A springboard for methodology courses, (2) a way of making trainees aware of the diversity of approaches to foreign language education, (3) a case study approach to curriculum, (4) a compendium of ways in which some schools solved problems, (5) a source of new ideas for trainees about organizing and finding approaches to foreign language instruction, and (6) a source of case descriptions for practice in evaluating program format and research results.

PATTERNS OF USE

The guide can be used by individuals, small groups, or college classes for reference, training, or as a decisionmaking aid.

ASSURANCES AND CLAIMS

Some words of caution and suggestions are in order for those who wish to consider adapting or adopting programs reported here. Some of the programs have been developed to solve problems; others have been developed through fortuitous circumstances, an outburst of energy, or simply a desire to do something different. Although some programs may have been created to solve given problems, they may in turn have created other problems, or might create similar problems in a different setting unless possible negative effects are anticipated and dealt with. Where the authors were given information on specific problems or fortuitous circumstances, they provided it in the program reports.

It may not be desirable or even feasible simply to duplicate programs. In most cases, adjustments will have to be made in fitting programs into new environments. Most of the programs reported here can be transferred across languages, and some might be transferred across grade levels. In some cases, especially those involving methodology, it would be advantageous to do background reading and even to visit programs. Finally, innovative programs as a rule need much administrative support in their early stages.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Options and Perspectives	1 per user	3.50	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

American Council on the Teaching of Foreign Languages
62 Fifth Ave.
New York, N.Y. 10011

AVAILABILITY

The book is not copyrighted. It is available at $3.50 per copy from:

Modern Language Association of America
62 Fifth Ave.
New York, N.Y. 10011

INFORMATION CURRENT AS OF MARCH 1975 ■

HOW TO CONDUCT A SEARCH THROUGH ERIC

An instruction to ERIC resources, including Resources in Education, Current Index to Journals in Education, and the ERIC Thesaurus

This 24-page booklet is the third component in a set of instructional materials related to the purposes, organization, and uses of the Educational Resources Information Center (ERIC). The booklet is designed to instruct the readers in ways of using the comprehensive ERIC indexing system in the search for information or materials relevant to their needs. The reader starts with a specific problem (how to plan a nature center) and, guided by a series of questions and illustrations, progresses through a step-by-step search for documents related to this problem. In the process of completing this search, the readers are introduced to ERIC's three basic research tools—*Research in Education*, *Current Index to Journals in Education*, and *The ERIC Thesaurus*,—and six basic steps in conducting an effective and efficient search. Supplementary information is included to anticipate problems which may be encountered when the readers attempt their own searches for educational information.

SUBJECT AREA(S)

Conducting a search through ERIC.

INTENDED USERS AND BENEFICIARIES

The intended users of this booklet are those in the educational community seeking information for specific needs.

GOAL(S) OR PURPOSE(S)

The purpose of this booklet is to enable readers to use the ERIC indexing system in the search for information or materials relevant to their needs.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

AVAILABILITY

Order No. ED 036 499, $0.76 (microfiche), $1.95 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 160 024

LIBRARY AND REFERENCE SKILLS CURRICULUM

A complete library program for students in grades 3-6

Library and Reference Skills Curriculum (LRSC) is a complete library program for students in grades 3-6. LRSC is meant to fill a gap too often found in elementary education. Teachers feel that library and reference skills are skills that their students need to function well in other curriculum areas. Yet, few teachers are able to provide this necessary instruction. LRSC permits the teacher without a library skills background to offer a comprehensive program in library instruction. Schools fortunate enough to have a librarian on their staff can use LRSC to individualize instruction and free the librarian to devote more time to library management and to creative activities such as story hours, book discussions, and student research projects.

LRSC familiarizes students with materials common to all libraries such as fiction, nonfiction, picture books, reference books, and card catalogs. It emphasizes five major skill areas: Using the library, book parts, dictionaries, encyclopedias, and other reference materials. Each of these skill areas is covered by a set of hierarchically arranged behavioral objectives.

Students work through the materials at their own pace. First, diagnostic pretests determine their competence in specific skills areas and place them into the appropriate lesson. When the lesson is completed, posttest data are used to evaluate their mastery of a particular objective. The bulk of the program is comprised of self-instructional booklets supplemented by real and simulated library and reference sources. All booklets are supplemented by answer keys that provide continual and immediate feedback to students.

Application activities serve both to reinforce and to extend the skills taught through the basic instructional materials. The activities offer each student exposure to a variety of interesting materials.

If two 45-minute periods are devoted to LRSC each week, the entire program can be completed in about 2 school years. However, depending on the resources and priorities of an individual school, portions of LRSC can be used to teach only those skills most critical to the immediate needs of students.

SUBJECT AREA(S)

Library skills

The program covers dictionary use (definitions, pronunciation, homonyms, synonyms, pictures and context clues, thesauri); encyclopedia use (locating information); book parts (index, table of contents, bibliography, title page, chapters); and other reference sources (magazines, newspapers, almanacs, atlases).

INTENDED USERS AND BENEFICIARIES

Library and Reference Skills Curriculum (LRSC) was developed for students in grades 3-6 who are reading at or above a 3.0 grade level. There are also indications that the program can be useful to students in grades 7 and 8.

GOAL(S) OR PURPOSE(S)

LRSC has three primary goals: (1) To enable students to function comfortably in any school or public library; (2) to equip students with the library and reference skills they need to function successfully in other curriculum areas, such as English, science, and social studies, and (3) to encourage students to be independent learners who seek out information to further their own learning and interests.

PATTERNS OF USE

LRSC is completely individualized. Students work at their own pace and may work in any skills area provided the level at which they work is appropriate to their needs and abilities and they progress according to the hierarchical instructional objectives.

ASSESSMENT PROVISIONS

Prerequisite to the program is a 3.0 grade level reading comprehension score on any standardized reading test. Students are placed into the appropriate level of instruction according to the results of the entry behavior sequence. Within levels, pretests determine the specific skills on which they should work. Posttests check mastery of skills.

TIME REQUIREMENTS

Two 45-minute to 1-hour periods per week should be devoted to LRSC. The entire curriculum can be completed in four semesters or 2 school years. This, of course, varies; the average student who starts LRSC in the 6th grade will complete the program in less time than an average 3d grader.

IMPLEMENTATION PROCEDURES

Students must have access to a school or other library because the program calls for use of certain reference sources and familiarity with a library. Developers encourage visits to a number of different libraries when possible. Space to store LRSC printed materials is also necessary. Teacher training materials are provided as part of the program.

Summary Cost Information

The total product installation costs and initial annual costs per school (1 class of 35 students in each of grades 3-6) are $1,981. The average continuation cost per individual student is $6, based upon present developer production costs. Commercial publication should reduce these costs. The supplementary books and storage hardware are common items found in most schools; the implementer may already have these materials. Please note that all costs are estimated.

ASSURANCES AND CLAIMS

The LRSC program has undergone extensive developmental evaluation both by the originators, Learning Research and Development Center, and by the later developer, Research for Better Schools, Inc. The developmental sequence at both institutions has been such that all program components have been reviewed in-house, revised, reviewed by "experts" in the field of library science and/or elementary instruction, tried out by component on samples of students from the target population, and tried out as a complete system of instruction. Since the developmental model employed with LRSC is based on a belief in development by successive approximations, the data gathered to date have been of a formative, rather than a summative, variety; that is, these data have been used both to make necessary revisions in the materials and to improve the assumptions and procedures of development.

The assurances offered for LRSC and the claims made about LRSC are based on all these aspects of the developmental sequence. Briefly, the data suggest that the materials developed to date do not affect users negatively, do not perpetuate social biases, are at least as effective as other comparable products, and can be used outside the developmental site with effective results. The LRSC materials not only meet these minimum requirements, but also extend them to the point of providing instructional options for the student who may not like particular materials, countering social bias by increasing the student's exposures and by providing content and instructional strategies not found in more traditional programs.

Assurances

Several hundred students have been exposed to LRSC in its developmental life. In all these experiences, there has been no reported instance of physical, psychological, sociological, or any other type of harm to a student in the program. In all of these experiences there has also been no reported objection to any of the materials with regard to issues of social fairness. Effort at Research for Better Schools, Inc., in fact, has been to counter those instances in the program where there is a potential of bias by a strict adherence to a ratio system of social fairness.

Evaluations of LRSC have not extended beyond the developmental sites. However, extensive testing by the Learning Research and Development Center (Pittsburgh) and Research for Better Schools, Inc. (Philadelphia) on a variety of student samples has generally yielded the same positive result, indicating at least a tendency toward replicability of effectiveness.

Claims

On the basis of information obtained throughout the developmental sequence, the following claims are made:

1. LRSC instruction is based on a set of hierarchically arranged objectives which are presented in such a way as to be self-instructional for students meeting the prerequisites.
2. Valid, criterion-referenced pretests, diagnostic, and mastery tests reliably and accurately assess each student's level of instructional attainment and need.
3. The teacher and student management functions can be carried out easily and efficiently.
4. All LRSC students progress within the program in the school year.
5. Students' pretest-to-posttest change scores show a significant amount of gain on a standardized test of study skills.
6. Students enjoy the materials and are motivated to work more with library materials as a result of exposure to LRSC.
7. Teachers react positively to the LRSC program content and management system.

RD 160 024

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Paper impressions (instructional materials, teacher's manual, test and instructional keys, student profiles, and flowcharts)	1 set per 35 students	298.00 initially; 210.00 for replacement set	Yearly	
Supplementary books	1 set per school	777.00	Reusable	Implementer
Storage hardware, optional (shelves, card files, etc.)	1 set per school	276.00	Reusable	Implementer

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Helen Felsenthal, Project Coordinator
Adrienne Naylor, Assistant Coordinator

AVAILABILITY

LRSC is under developmental copyright. Tests and instructional materials are completed and are available on a test basis. Order from:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

POSTSECONDARY EDUCATION

1225

OVERVIEW

TERRY HARTLE
Education Policy Research Institute
Washington, D.C.

Postsecondary education: Defining the universe

Postsecondary education is an elusive concept. While to some observers it is the same as "higher education," it is perhaps more instructive to think of postsecondary education as "the whole spectrum of institutions, agencies, and activities that are concerned in some fashion with education beyond the high school level."[1]

Harold Orlans has succinctly identified the underlying current status as opposed to historical philosophy of postsecondary education and some of the reasons for its emergence:

> * * * the declining prestige for higher education following the disruptions of recent years; the rising costs of college and the declining employability of many graduates; the effort to tie the Nation's educational expenditures more closely to its manpower needs; the effort to increase the practical usefulness of advanced education and to dignify vocational education * * * Postsecondary education is an eminently democratic concept that seeks to equate, for purposes of public policy, planning, and student aid, the education of physicians and nurses' aides, of physicists and plumbers, of Ivy League freshmen and 17-year-old high school dropouts who return to school to learn a trade.[2]

In short, such a philosophy recognizes the social and educational contributions made by both traditional higher education and the larger number of business and technical schools the so-called noncollegiate or nontraditional sector of education.

Estimating the elements comprising the postsecondary universe is a difficult task. While it is fairly simple to identify the almost 3,000 institutions in traditional higher education,[3] it is almost impossible to arrive at a consensus on noncollegiate (or proprietary) institutions. Estimates in this realm are complicated by the high turnover of institutions, the question of including avocational schools, and whether the educational programs of groups such as industry, churches, and labor unions should be counted in the total. Thus, the total institutions in the noncollegiate sector are estimated at between 7,000 and 35,000 schools. While most of this overview centers around traditional higher education, it should be noted that public policy is increasingly recognizing the contribution and role that nontraditional schools play in our society. Increasingly, statewide planning studies and inventories of postsecondary education resources include information and recommendations for nontraditional as well as traditional postsecondary education. Thus, we may expect that this public recognition and broadening of the postsecondary universe will continue.

Dr. Terry Hartle is a Research Associate in Public Administration and Intergovernmental Relations at the Education Policy Research Institute, a Washington, D.C.-based division of the Educational Testing Service.

Intergovernmental and fiscal division of responsibility

The Federal interest in traditional higher education predates the Constitution with the Northwest Ordinance of 1785. Over the years, the Federal role has expanded significantly through such landmark legislation as the Morrill Acts of 1861 and 1890, the GI bill, the National Defense Education Act, the Higher Education Act of 1965 and the amendments of 1972, and the steadily increasing support for research and development after the Second World War. Most of this expansion, however, has been in dollar terms, for the traditional responsibilities have remained quite stable. The States have the basic responsibility for maintaining the system and the Federal Government supports those activities which are truly national in character and transcend the needs of a given State or region. Ernest Boyer, chancellor of the State University of New York, suggests more specifically the major Federal obligations:

1. Assure equality of access.
2. Support research and graduate education.
3. Support high priority professional fields of study (e.g., medicine).
4. Stimulate educational and managerial reform.[4]

(For a more detailed examination of the intergovernmental division of responsibilities, refer to John Honey and Terry Hartle, *Federal-State-Institutional Relations in Postsecondary Education*, Princeton: Educational Testing Service, 1975.)

Clearly, support for higher education has become a partnership between the Federal Government and the States. While most of those connected with higher education know that Federal support in the decade of the sixties increased significantly, few realize that State increases were even more pronounced.[5]

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[1] National Commission on the Financing of Postsecondary Education. *Financing Postsecondary Education in the United States.* Washington, D.C.: Government Printing Office, p. 13.

[2] Harold Orlans *et al.*, *Private Accreditation and Public Eligibility*. Washington, D.C.: National Academy of Public Administration Foundation, 1974, pp. 269-270.

[3] There are 2,948 (*National Commission on Financing Postsecondary Education*, p. 45) which includes branch campuses as separate campuses. If branch campuses are not counted separately, the total is 2,686.

[4] *National Commission on the Financing of Postsecondary Education*, p. 361.

[5] A 295-percent increase in State appropriations between 1962 and 1971. Lymann Glenney and James Kidder, "Trends in State Funding in Higher Education: A Preliminary Report," Education Commission of the States, Report No. 53, January 1973, p. 14.

POSTSECONDARY EDUCATION

Current issues

Around 1969 it became clear that the rapid-growth years were over and that financial austerity would become the way of life for higher education. Studies by Cheit, Jenny and Wynn, and Jellema demonstrated the presence and likely impact of the worsening financial conditions on higher education. The realization that growth was limited added special meaning to the six major reports prepared by eminent national groups in the early years of the 1970's: The Carnegie Commission, the Committee for Economic Development, the National Board on Graduate Education, the National Commission on the Financing of Postsecondary Education, the National Council of Independent Colleges and Universities, and the Special Task Force of Health, Education and Welfare chaired by Frank Newman. While these groups dealt with a vast range of issues, it is possible to identify three general concerns which all the reports addressed: Student aid, management concerns, and financing. Although the focus may have changed somewhat, these three concerns remain near the center of public debate and interest today.

Student aid. There is considerable interest in the complex student-aid menu. The Federal Government currently provides funds for postsecondary education through six separate programs, all authorized through Title IV of the Higher Education Act of 1965. These programs are: The National Direct Student Loan, the College Work Study, the Supplemental Educational Opportunity Grants, the Guaranteed Student Loans, the Basic Educational Opportunity Grants, and the State Supplemental Incentive Grants. A primary concern today centers around the distribution of student aid: Should the money go directly to the student or should it be allocated to institutions and then be distributed to the individual. This argument was settled to some extent by the creation of the Basic Education Opportunity Grant (BEOG) program in 1972 which entitled each student to $1,400 less the amount his or her family could be expected to contribute. Yet, while most higher education representatives now recognize the BEOG as the primary student-aid program, Federal appropriations to this program are limited by a provision that $563 million be spent on other student-aid programs before any money is spent on the BEOG. Considerable research needs to be done on the impact of the title IV provisions on States, institutions, and their students. Likely areas for further investigation also include: The provision of adequate information to States and institutions so they can carry out their own planning coordination activities, the impact of Federal-aid policies on State student-aid programs, and the impact of such an array of programs (with several separate applications) on potential students. Additionally, careful research must be done on the specific problems of the individual programs. For example, what can be done to correct the high default rate of the Guaranteed Student Loan? Since the student-aid legislation expires in this session of Congress, any research carried on in this area will be very timely.

Federal regulations/accountability. Many of the management issues identified in the previously cited reports centered on improving the efficiency of higher education. In the past year, however, the concern has focused on the increasing costs imposed on colleges and universities to comply with Federal social programs. In one sense it is ironic that universities that encouraged new social programs are now haunted by them. This does not, of course, make the costs of compliance any less onerous. The Federal regulations have created, in Earl Cheit's words, "a new purgatory, right here on earth."

The costs of compliance are, by all measures, substantial. A recent study by the American Council on Education[6] illustrated the large increase in compliance costs over the past 10 years:

Type of institution:	1965	1975
Large public	$438,000	$1,300,000
Medium private	2,000	300,000
Large private	110,000	3,600,000

Change magazine has estimated the nationwide cost at $2 billion—or almost the equivalent of philanthropic contributions in 1972. Because this issue is so new, little research has been undertaken to identify more specifically the costs imposed on universities and alternatives to such comprehensive requirements. Clearly more research is needed.

In a sense, this concern with compliance is part of a large concern that institutions of postsecondary education be accountable to both their students and the general public. While not a new issue, the interest in accountability surfaced as a priority recently in light of several student suits against postsecondary institutions charging that the colleges failed to deliver what they promised.[7] There is a long history of such lawsuits; however, until recently they were most frequently brought against proprietary schools. They have now begun to affect traditional higher education institutions as well. These lawsuits have not been very successful so far since the charges—usually fraud, negligence, and breach of contract—are difficult to prove, especially against universities. This does not mean, however, that universities need not concern themselves with being accountable. Some institutions have made significant responses to the demands for accountability. A summary of these trends can be found in the National Center for Higher Education Management report, "Accountability in Higher Education, Report No. 1." More research into the questions posed by "consumer suits" needs to be undertaken, however, since the demands for accountability seem to be mounting.

Public financing of higher education.—In the past 5 years, it has become clear that higher education growth rates are slowing as fast as they formerly accelerated. The first evidence of this change was financial: Costs began to outstrip income. Then a slowing of the enrollment rates (with evidence suggesting a future decline) became apparent. Although there are little data to help assess the relative importance of the individual factors that influenced the enrollment decline, the Carnegie Commission identified four significant factors:

1. The abolition of the draft;
2. The rising costs of college attendance that have been

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[6] "The High Costs of Compliance" by Jack Magarrell, *The Chronicle of Higher Education*, July 21, 1975, p. 1.

[7] "Students Filing Consumer Suits" by Philip Semasi, *The Chronicle of Higher Education*, p. 1, November 24, 1975.

associated with accelerated inflation rates and accompanying increases in tuition and other college charges.

3. The changes in the job market for college graduates; and
4. Liberalization of college rules to permit deferred admissions and "stopping out" of students in the midst of college careers.[8]

While all higher education institutions suffer the pains of limited growth (the so-called "steady state" condition), the impact is most seriously felt at private institutions that, on the average, receive 66 percent of their operating income from tuition payments by students. Yet while there is a growing realization that private higher education faces financial distress, there is little agreement about the causes of the distress, its severity, or what should be done to correct it.

Despite the predictions of impending doom, recent studies suggest that the financial situation is not as dire as some believe. A recent study by Howard Bowen and John Minter found private higher education "in basically good condition" although 27 percent of the private institutions were in "serious trouble with ultimate survival in doubt." Some of the study's findings reported in *The Chronicle of Higher Education* included: Enrollment up 8 percent since 1969-70, little evidence of financial retrenchment, and revenues (after correcting for inflation and enrollment) had increased slightly since 1970. This report is to be the first in a series of yearly examinations by the Association of American Colleges which will provide valuable time-series data for measuring the health of private institutions.[9]

It is reassuring to learn that the financial situation has not yet reached crisis level, but there is a danger that some individuals will see such studies as proof that the "good old days" of the sixties have returned. Such a viewpoint is, of course, completely misguided. The simple fact remains that there were 3.1 million children born in 1961, compared with 4.3 million in 1951. Such a change in the birth rates will, by 1980, have a very pronounced impact on higher education.

Institutional response to financial distress has, to date, been largely restricted to deferring maintenance, restricting hiring, and holding back on salary increases. While such measures are a necessary first step, there are limits to the saving they can generate. Clearly, public funds will be needed if private higher education is to be preserved as it currently exists.

At least four basic public policy options are identifiable: (1) No public involvement—let the market run its course, (2) alter the tax laws to encourage philanthropy, (3) State aid to private institutions; and (4) Federal aid. Considerable research must be done to identify more specifically the policy options that do exist and the pros and cons of each. Hopefully, such research will be initiated promptly so constructive debate can begin before the financial situation reaches crisis levels.

NIE postsecondary education activities

The National Institute of Education has sponsored two types of products to aid the administrators and educators of postsecondary education in understanding and responding to changing student needs and interests and expanding accountability requirements. The first type of product is the comprehensive management and budgeting system developed by the National Center for Higher Education Management. This system provides postsecondary administrators at the State and local levels with the computer software and documentation required to implement a program budgeting system. Manuals accompanying the system provide guidance in selecting and collecting measures of productivity in a university setting, allocating faculty salaries among departments, and predicting the flow of students among academic departments.

The second type of product is resource materials designed to aid the postsecondary practitioner in keeping abreast of innovations in administration, finance, and instruction. Examples of such products are the reports jointly produced by the ERIC Clearinghouse on Higher Education and the American Association for Higher Education. Report topics include: *Higher Education and the Steady State; State Aid to Private Higher Education, Report No. 3;* and *Strategies for Improving College Teaching, Report No. 8.*

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[8] Carnegie Commission on Higher Education, *More Than Survival*, San Francisco: Jossey-Bass, 1975.

[9] Jack Magarrell, "Private Higher Education: Leaner, Perhaps Stronger," *The Chronicle of Higher Education*, December 8, 1975, p. 7.

STATE POSTSECONDARY EDUCATION PLANNING MODEL (SPEPM)

A computerized State planning model to assess the impact of alternative financing plans on postsecondary education

The State planning model is intended to assist, with the use of a computer, those involved in postsecondary planning and management by providing estimates of the impact of alternative financing plans on postsecondary education institutions and students. More specifically, there are three intentions:

1. To develop the capability to assess the effects on both students and institutions of several simultaneous changes in policies pertaining to the conduct of postsecondary education at the State level—policies dealing with such factors as tuition levels, appropriations, and student aid.
2. To further the development and installation of tools to assist planning of postsecondary education resource use adaptable to the needs of individual States;
3. To provide analytic insight into the impact of alternative financing plans on education by estimating the responses of institutions and students.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas of this document.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended product users.

GOAL(S) OR PURPOSE(S)

The objective of this product is to assist State-level planners and decisionmakers in assessing the impacts of alternative financing plans and resource allocations on students and institutions to determine which combination of resources would best achieve desired goals.

IMPLEMENTATION PROCEDURES

The computer software supporting this product is now available in pilot test version only. The final software should be available in spring 1976.

ASSURANCES AND CLAIMS

The *State Postsecondary Education Planning Model Software System* has been prepared to provide information on the operation of the second version of the *State Postsecondary Education Planning Model* (SPEPM), replacing the previous version of the operating instructions (*SPEPM Software System*, December 1974). In its current state, the document, as prepared by the National Center for Higher Education Management Systems (NCHEMS) staff, is a preliminary draft only and has not been reviewed by the NCHEMS advisory structure.

The original version was reviewed by technical representatives from the SPEPM pilot test States (Colorado, Maryland, Massachusetts, and New York), and their comments were utilized in the development of this version. A second preliminary version of the NCHEMS *State Postsecondary Education Planning Model* has been developed and is operational on the University of Colorado CDC 6400 computer system. This software document describes the operating guidelines and instructions with sufficient examples to permit the use of the model by users in the pilot test States.

The *State Postsecondary Education Planning Model Software System* will be distributed to and reviewed by the participating pilot test States, technical consultants, selected reviewers, and members of the NCHEMS board of directors. Based on the reviews, revisions will be made by issuing replacement pages to all the users of the SPEPM. To insure that this document is maintained with the most up-to-date pages, the SPEPM users receiving this document are requested to order new copies of the document from NCHEMS (rather than duplicating the document itself) so that an accurate distribution list can be maintained for updating the document and to make sure the replacement page index corresponds to the pages in the document. It is intended that this document (with the appropriate revision pages) be used through the pilot test of the SPEPM (fall 1975).

The *SPEPM Software System* should be used with the *Preliminary Framework for the State Postsecondary Education Planning Model*. The user is cautioned that this version of the model has not been fully tested and will not have been fully tested under this release version. The user is also cautioned that this State-level tool has a similarity to any desk top calculator in that it is extremely flexible in the way it can be used to add, subtract, multiply, and divide higher education data. The caution is not so much tied to the model's flexibility, but to the fact that such flexibility can be misused by an inexperienced analyst to produce reports that are just as incorrect as if that same analyst had made the same calculations on a desk calculator. Yet, it is this flexibility to incorporate different planning designs for different policy questions or different conditions that makes the SPEPM a potentially useful tool to many planners and managers in postsecondary education.

RD 170 001

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Cost and Rate	Source if Different from Distributor
Preliminary Framework for the State Postsecondary Education Planning Model	1	To be determined	Reusable	
State Postsecondary Education Planning Model Software System (document)	1	No charge	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Ellen Cherin
Mark Chisholm
Vaughn Huckfeldt
Mark Smith

AVAILABILITY

The computer software is now in pilot test form and should be available in final form in spring 1976. The documents are currently available in pilot test form. The revised editions should be available early in 1976 from:

National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

EXAMINATION OF POSSIBLE STATEWIDE APPLICATIONS AND EXTENSIONS OF THE NCHEMS PROGRAM CLASSIFICATION STRUCTURE

An outline of a State-level information structure incorporating the National Center for Higher Education Management Program Classification Structure

The primary purpose of this document is to suggest to State postsecondary education agencies and other organizations concerned with postsecondary education planning and management a possible State-level information structure that incorporates the National Center for Higher Education Management Systems (NCHEMS) Program Classification Structure (PCS). It provides some specific suggestions concerning how such agencies might aggregate institutional data presented in PCS format for various purposes, and, in this context, touches on the sensitive question of the level of detail at which data are required for statewide planning and management efforts. It should not be construed as a statement of policy by NCHEMS regarding either the necessity or desirability of using the PCS as a portion of a State-level information structure.

Readers are encouraged to consider the suggestions in this document as examples of the kinds of things that might be done. The specific solutions chosen by individual organizations should be developed after careful consideration of the problems that must be dealt with and the circumstances that surround them. Ideally, all the institutions and agencies involved and affected by such a structure should be involved in the developmental process.

The definitions of institutional characteristics included in the section entitled "Institutional Characteristics of Possible Interest at the State Level" coincide with definitions currently provided in the NCHEMS *Statewide Measures Inventory*. In all cases, this inventory, which will be updated as appropriate in the future, is the authoritative source for the definitions.

SUBJECT AREA(S)

The subject area is postsecondary education planning and management.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The objective of this product is to assist organizations and agencies concerned with postsecondary education in the development of improved procedures and tools for resource allocation and management and in the development of procedures that facilitate the exchange of comparable data among these institutions and agencies.

IMPLEMENTATION PROCEDURES

Late in 1974, a State-level information-base project was initiated which will build on the foundations developed in this document.

ASSURANCES AND CLAIMS

Readers are encouraged to consider the suggestions in this document as examples of the kinds of things that might be done. The specific solutions chosen by individual organizations should be developed after careful consideration of the problems that must be dealt with and the circumstances that surround them. Ideally, all the institutions and agencies involved and affected by such a structure should be a part of the development process.

The definitions of institutional characteristics included in the section entitled "Institutional Characteristics of Possible Interest at the State Level" coincide with definitions currently provided in the NCHEMS *Statewide Measures Inventory*. In all cases, the inventory, which will be updated as appropriate in the future, is the authoritative source for the definitions.

The document presents not only several possible applications, but also many of the consequences and implications that should be considered.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
An Examination of Possible Statewide Applications and Extensions of the NCHEMS Program Classification Structure	1	1.50	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management
Systems at Western Interstate Center for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Leonard C. Romney
Paul Wing

AVAILABILITY

An Examination of Possible Statewide Applications and Extensions of the NCHEMS Program Classification Structure is available from:

National Center for Higher Education Management
Systems at Western Interstate Center for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 003

INFORMATION EXCHANGE PROCEDURES (IEP)

*A set of recommendations and guidelines for
collecting, reorganizing, and displaying
educational planning data*

Information Exchange Procedures (IEP) is a set of recommendations and guidelines for collecting, reorganizing, and displaying:

(1) General descriptive and supporting institutional data;

(2) Direct cost for all IEP activity centers and direct cost by unit of instruction (for course levels within disciplines and student levels within student programs);

(3) Full cost for IEP-defined "final cost objectives" and full cost by unit of instruction (for course levels within disciplines and student levels within student programs);

(4) Outcomes of student programs.

A fundamental purpose of the NCHEMS *Information Exchange Procedures* is to assist postsecondary education institutions in establishing a basic set of data useful for the improvement of educational planning and management. This purpose is pursued through IEP in two ways: (1) By helping the institution to create its own internally useful data set and (2) by fostering the creation and exchange of comparable data sets among similar institutions—the simple premise being that institutions may learn from each other.

One of the initial objectives of IEP was to establish a methodology for developing and exchanging information on educational costs, and thus a substantial portion of IEP documentation has addressed the issues and procedures associated with cost calculation. An additional objective was the development of a broader data set, one composed of more than cost information alone. This development was subject to two general guidelines: (1) The information included in IEP should help users to understand better the activities and programs of the institution, and (2) the information included in IEP should encourage institutions to perform analyses that will help in the evaluation and improvement of programs.

The resulting IEP basic data set consists of information of each of the following types: institutional characteristics, student enrollments and characteristics, personnel resources, other resources, institutional finances, costs by instructional discipline and student program, and student outcomes.

SUBJECT AREA(S)

Postsecondary education planning and management

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators

GOAL(S) OR PURPOSE(S)

To lend additional insight into the planning and management functions of postsecondary education through use of information and comparative analysis.

IMPLEMENTATION PROCEDURES

For full implementation of this product, computer access would be necessary.

ASSURANCES AND CLAIMS

Information Exchange Procedures (IEP) is a set of standard definitions and procedures for collecting information about disciplines and student degree programs, outcomes of instructional programs, and general institutional characteristics. These definitions and procedures have been developed to facilitate exchange of information among postsecondary education institutions, providing them with some assurance that data they exchange are useful for purposes of comparison.

The procedures were developed by the NCHEMS staff with guidance from a task force and steering committee, composed of institutional and State agency representatives. *Information Exchange Procedures* and related computer software (the NCHEMS *Costing and Data Management System*) were pilot tested in about 40 institutions during 1974 and 1975. Based on the results of this pilot test and continuing developmental work, both the procedures and the computer software have been modified. During 1975 (and continuing into early 1976), over 200 institutions will begin using these improved products.

The procedures described in these manuals have been reviewed and approved by IEP advisory groups and the NCHEMS board of directors, and released for wide-scale implementation. While IEP is intended to be a final product, wide-scale implementation may point to additional information needs of institutions that can be addressed in updates to this manual if necessary. However, NCHEMS feels that IEP is sufficiently refined at this time that it can be released to institutions interested in implementing IEP.

The procedures and definitions recommended are "targets" for institutions. While it is anticipated that most institutions will be able to follow these recommendations, some institutions may not have available the required information and others may be able to provide it only at an unreasonable cost. Others may find that only after several years of using IEP can data be developed that accurately reflect the characteristics of the institutions. For some institutions the definitions and procedures may be too complex; others may find them too simplistic. Any effort at exchange of data among institutions involves some compromise in an attempt to accommodate the wide variation among institutions. Consequently, while comparable information for exchange is the goal of IEP, NCHEMS cannot guarantee absolute comparability of data as the final result of IEP. But, hopefully, implementation of IEP will represent reasonable progress toward that goal.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Information Exchange Procedures Activity Structure	1	1.50	Reusable	
Information Exchange Procedures Data Formats and Definitions	1	1.50	Reusable	
Information Exchange Procedures Cost Study Procedures	1	1.50	Reusable	
Information Exchange Procedures Outcomes Procedures	1	1.00	Reusable	
Student outcomes questionnaire for program completers	1 per student		Consumed as used	

Note: The NCHEMS-developed computer software which supports this product is available at a cost of $150.

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
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Richard S. Johnson
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AVAILABILITY

This product is currently available from:
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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 004

A REFERENCE GUIDE TO POSTSECONDARY EDUCATION DATA SOURCES

A summary of publications, articles, and data bases containing data items used in the NCHEMS educational planning systems

A Reference Guide to Postsecondary Education Data Sources identifies and describes publications, articles, and data bases that contain data related to most of the items of information identified in the National Center for Higher Education Management Systems (NCHEMS) *Statewide Measures Inventory* (Allman, Wing, and McLaughlin, 1975). This document does not contain the actual data, but it does describe and reference various sources in which the data can be found. In addition, it provides information about: (1) How the data are organized (e.g., item-by-item, in tables, by chapters); (2) the kinds of information given (e.g., data on personal income, number of high school graduates, enrollments in postsecondary education institutions); (3) the level of aggregation (e.g., by region, State, postsecondary education institution); (4) the years for which data are available; and (5) those measures in the *Statewide Measures Inventory* which correspond to the data referenced.

This product has been developed as a companion to the NCHEMS *Statewide Measures Inventory* with the objective of assisting individuals in the identification of available data sources that can be related to postsecondary education planning and decisionmaking in the United States. Although the primary target audience is State-level postsecondary education planners and decisionmakers, the data corresponding to the items of information in *Statewide Measures Inventory* are of sufficiently general interest that the reference guide should also be useful to researchers, planners, and decisionmakers at the institutional, local, and national levels.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The goal of this product is to assist individuals in the identification of available sources of data that can be related to postsecondary education planning and decisionmaking in the United States.

ASSURANCES AND CLAIMS

Two criteria have been applied to determine whether a data source should be included in this document:

(1) The information in the data source must be national in scope, covering a majority of the 50 States, with State-by-State aggregations of data.

(2) The data must be applicable to at least one measure in *Statewide Resources Inventory*.

These criteria were chosen because of the magnitude of postsecondary education-related data collected in the United States.

Limitations of the reference guide can be grouped into three major categories: The literature search, the level of detail used for the data source descriptions, and the criteria used for inclusion.

Data sources described in the reference guide may not reflect the most recent publications in a series. In these cases, the referenced documents should be used as examples of the kinds of data published in the series. In addition, omissions of data sources which meet the criteria specified for inclusion can be attributed to an incomplete literature search and/or shortages of necessary resources.

No attempts have been made to determine the methodologies used by the various data providers in their data collection efforts. The modes of inquiry, the sizes and types of universes and samples under consideration, and the units of inquiry have not been specified. Also, no assessments of data attributes have been made. Potential users of the data identified will have to make their own quality checks on the data.

Publications related to data collected by individual States and groups of States that were not collected in a comparable fashion for the majority of other States, data collected by individual postsecondary education institutions that are not collected by all institutions in the majority of States, and data that are not reported on a State-by-State basis are generally not included. These areas were neglected because of the large amount of data potentially available and the unwieldy nature of a document that would address all these data sources.

Statewide Measures Inventory has been used as a subject classification scheme for the data sources identified. One limitation of this classification scheme is that measure numbers and names may not imply the full range of the kinds of data that might be related to them. In addition, some of the relationships between the data and the measures were not as clear cut as could be desired, and subjective decisions regarding where the data should be referenced in section 1 had to be made.

RD 170 004

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
A Reference Guide to Postsecondary Education Data Sources	1	6.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
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Katherine A. Allman

AVAILABILITY

This product is currently available from:
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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 005

POSTSECONDARY EDUCATION INSTITUTIONAL DATA USE PROCEDURES MANUAL

A guide for interpretation and use of institutional and student data

The manual supports both an institution's interpretation and use of its own *Information Exchange Procedures (IEP)* data, as well as comparative analysis and use of multi-institutional *IEP* data.

The document will contain a set of recommended procedures and display formats to aid in the descriptive analysis, interpretation of the results of that analysis, and utilization of the results in planning and management.

Examples of the content and approach of this document are:

1. Descriptive narratives of the overall institution and its student programs, designed to communicate the relevant content of the *IEP* data base, particularly to the nontechnical user;
2. Detailed profiles of student programs, disciplines, departments, and other organizational units, designed to amass in one place all the information exchange procedure *(IEP)* data about the particular unit being examined;
3. Data used in analytical studies to address issues of particular concern in a tighter research mode. The three issues illustrated here are (a) the description and analysis of costs and cost differences across disciplines and student programs; (b) the examination of student outcomes and their differences across student programs and other student subpopulations; and (c) the documentation and analysis of trends over time in costs, student outcomes, and enrollment patterns.

For each kind of data presentation, procedures will be given for obtaining the necessary information. General comments and guidelines will be given for the user's interpretation of the data in each form, including particular attention to data limitations. Each type of data will be accompanied by a list of specific planning and management activities that are felt to be especially useful.

It is hoped that actual results of analysis conducted through this product will provide some of the building blocks necessary to develop progressively more sophisticated data use and analysis products.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users and beneficiaries.

GOAL(S) OR PURPOSE(S)

The goals of this product are to delineate planning and management uses of existing data bases and to improve institutional capability to utilize data in planning and management. Particular emphasis will be placed upon facilitating institutional interpretation and use of the *Information Exchange Procedures* (IEP) data set.

ASSURANCES AND CLAIMS

This product is being developed with the advice of a 12-member task force. In addition, the document will undergo extensive review by an outside committee and by the National Center for Higher Education Management Systems (NCHEMS) staff. Pilot testing will be done from summer 1975 to spring 1976.

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

AVAILABILITY

The document will be available in field review edition in summer 1975 from:

National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

STATEWIDE MEASURES INVENTORY

Information on statewide postsecondary education planning and management

This product consists of a list of items of information, along with concise definitions and other information of interest, relevant to statewide postsecondary education planning and management. It has been designed primarily as a working document for use by State-level postsecondary education planners and decisionmakers. The primary objective of the inventory is to improve and simplify communication through increased standardization of terminology and usage. Secondary objectives are to provide assistance to those concerned with developing and designing data bases and information systems, and to suggest ways that statewide planning and decisionmaking might be improved through the identification of problems and issues to which the measures in the inventory are relevant.

In developing definitions for many of the measures and glossary items in the inventory, the staff has drawn heavily on past and present efforts of organizations other than the National Center for Higher Education Management Systems (NCHEMS) as well as other NCHEMS projects. Considerable time and effort have been devoted to insuring that the definitions of terms (whether they be measures or glossary terms) included in this inventory are compatible with those used in other NCHEMS efforts. This does not mean that the definitions are identical, but it does mean that at the time of the publication of this document they are substantively the same.

Although the product was developed in the context of statewide planning and decisionmaking, it may prove valuable to institutional and national planners and decisionmakers as well. To the extent that their concerns coincide with those that are important for State-level planners and decisionmakers, they should find it a valuable reference document.

It should be emphasized that the inventory is not by itself a useful planning and management tool. It does provide a start toward the standardization of terminology for postsecondary education planning and management, and it suggests ways of linking this terminology to a variety of general statewide concerns. However, with respect to the tasks of analyzing specific statewide problems and issues and developing operational information systems, the inventory is at best a point of departure or frame of reference.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The purposes of this product are to identify and define those measures and items of information which are required for statewide planning and decisionmaking purposes.

ASSURANCES AND CLAIMS

To insure that all measures under consideration for inclusion in the product were treated systematically and consistently, specific criteria for including items were identified early in the project. These criteria provide relatively concrete guidelines for determining whether an item currently in the inventory ought to be dropped. In a sense, they define the objectives of the inventory. Two major criteria were identified:

(1) The statewide measures project will focus on the identification of descriptors or measures relevant to State-level postsecondary education planning and management.

(2) Only measures that are or would be useful to State-level agencies in most States should be included in the inventory.

Four secondary criteria or guidelines were also established:

(1) Measures and data elements suggested by other NCHEMS products and projects shall be considered for inclusion in the inventory.

(2) Wherever institutional data are required to compute or develop a statewide measure, the procedure should call for an aggregation of existing institutional data elements as defined in the *Data Element Dictionary*.

(3) Data elements relevant to all sectors of postsecondary education will be included to the extent possible.

(4) The feasibility of collecting the data will be considered when deciding whether to include specific measures. If it is clearly infeasible to collect data for a particular measure, the measure usually will be omitted from the inventory.

Relevance to statewide planning and management has been the most important criterion, primarily because the task force and staff were concerned that the project should not become involved unnecessarily in matters that do not or should not concern it. In some cases it was difficult to apply this criterion precisely, usually because of differences in actual practices in State agencies across the country and differences in the perceptions of the task-force members. In such situations, the task force usually opted to include the item, particularly when a clear-cut definition for the measure was available.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Statewide Measures Inventory (Field review edition)	1	4.00	Reusable	
An Overview and Guide to the Use of the Statewide Measures Inventory	1	2.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
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Katherine A. Allman
James N. McLaughlin
Paul Wing

AVAILABILITY

The two documents composing this product are currently available in field review edition. The revised edition should be available July 1975 from:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 007

POSTSECONDARY EDUCATION OUTCOMES MEASURES AND PROCEDURES MANUAL

A manual which suggests the definitions and
data-acquisition procedures necessary for
collecting top-priority outcome measures

Most decisionmakers concerned with postsecondary education today have recognized that for the planning and management process to be effective, it not only must be based on information about inputs, activities, and costs, but also must take into consideration information about the outcomes or results of educational programs. While these decisionmakers have acquired this awareness, they are equally aware of the complexity of the problems associated with identifying and measuring the outcomes of postsecondary education and then using this information for planning, management, and accountability purposes.

This outcomes product rests on the premise that three needs must be met if outcomes information is to be effectively incorporated in postsecondary education planning and management:

1. The need to provide a comprehensive picture of the outcomes of postsecondary education and to develop the capability to measure them;
2. The need to provide a structure for organizing outcomes information as a prerequisite for analysis and communication;
3. The need to develop analytic procedures for applying this information to particular planning and management problems.

This product develops the definitions and data acquisition procedures necessary for collecting the top-priority outcomes measures.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The purposes of this program are to develop communication, analytical tools, and procedures for identifying, measuring, and analyzing the outcomes of postsecondary education and to assist decisionmakers in using outcomes information in their planning and management activities.

ASSURANCES AND CLAIMS

The *Outcomes Measures and Procedures Manual* presents alternative procedures for acquiring a select number of postsecondary education outcomes measures (indicators), which have been identified by a wide range of college administrators and State-level decisionmakers as being of high importance for helping provide the outcomes information needed to carry out their decisionmaking responsibilities. While the manual is intended as a practical and flexible guide that can be used by a rather broad audience, it is specifically aimed at those persons involved in educational planning, institutional research, and program evaluation.

Five major guidelines have been followed in the development of the manual:

1. The manual should, to the extent possible, bridge the full range of postsecondary education outcomes measures. That is, measures of the outcomes of the instructional, research, community service, and institutional support programs associated with the various types of postsecondary institutions should be considered for possible inclusion in the manual.
2. The outcomes measures considered for inclusion in the manual should reflect the fact that postsecondary education outcomes occur over an extended time period. Therefore, the manual should consider measures of both short-term and long-term outcomes.
3. The outcomes measures and their corresponding acquisition procedures should reflect a recognition that the information needed by different decisionmakers varies considerably as to when it is needed and at which level of detail.
4. The initial version of the manual should be primarily a compilation of the current state-of-the-art capability with respect to feasibility of outcomes data collection. Further versions will incorporate improved and newly developed outcomes data acquisition procedures.
5. The manual should be a "flexible tool" from which users can choose the data acquisition procedures that are appropriate for deriving the outcomes measures they need.

The outcomes measures and data acquisition procedures contained in this version of the manual were developed in two phases. Phase 1 was concerned with the identification of those outcomes measures most needed by postsecondary education decisionmakers. Recognizing that the National Center for Higher Education Management Systems (NCHEMS) current constituency was composed primarily of institutional and State-level decisionmakers, the following types of decisionmakers were surveyed to determine the outcomes measures which they believed would help provide the outcomes information they needed:

1. Administrators from community colleges, public and private 4-year colleges, and public and private universities;

2. State directors of higher education and community/junior college governing boards and coordinating councils;

3. State legislators who chair legislative committees concerned with education and appropriations. Mailed questionnaires were used in the survey to solicit the responses of the different decisionmakers in the sample. The lists of outcomes measures included in the survey questionnaires were taken from NCHEMS' *Inventory of Higher Education Outcomes Variables and Measures* (NCHEMS, Micek and Wallhaus, 1973).

Phase 2 was designed to develop the definitions and data acquisition procedures necessary for collecting the top-priority outcomes measures delineated as a result of phase 1. Major activities in this second phase included a synthesis of existing procedures being used by institutions or individual researchers to acquire outcomes information and the conduct of special workshops to supplement staff efforts in the development of improved and new outcomes measures and data acquisition procedures.

The field review edition of the manual was published in 1974 to solicit potential user comments and suggestions regarding its organization, content, and overall utility. The review of the manual will also consist of an extensive pilot test to assess the feasibility and usefulness of the outcomes measures and acquisition procedures contained herein. The results of this review process will be used to improve upon the manual, which will be published as a "first edition" in 1976.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Outcomes Measures and Procedures Manual	1	To be announced	Reusable	
Outcomes Measures Identification Study	1	2.00	Reusable	

DEVELOPER/AUTHOR:

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William R. Arney
Yong S. Lee
Sidney S. Micek
Allan L. Service

AVAILABILITY

The documents are available from:
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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 008

PROGRAM MEASURES

A system for organizing information about postsecondary education

Program Measures has been developed to aid instruction of users of the National Center for Higher Education Management Systems (NCHEMS) program classification structure by providing the categories of information that describe program elements. This document also provides some alternative suggestions for structuring information for analysis purposes.

This technical report identifies, describes, and categorizes quantitative indicators into six program measures groups that provide information about each program classification structure (PCS) program element as follows:

1. Resource measures provide data on the personnel involved, the facilities and equipment utilized, and the supplies and services consumed.
2. Financial measures indicate the funds obtained from various sources; the capital investment expenditures incurred for land, buildings, and equipment; and the operating expenditures for personnel, supplies, and services.
3. Beneficiary group measures describe the groups of people who benefited.
4. Target group measures identify the people toward whom, or places/things at which, the activities of the the program element were directed.
5. Activity measures describe the types and levels of activities conducted.
6. Outcome measures indicate the outcomes or products generated as a result of the activities of the program element.

In addition to specifically attaching the *Program Measures* to the PCS, this document includes a discussion on alternative ways of structuring information for analysis. The discussion is meant to promote a speculative note regarding the further development and use of structures and measures in analyzing information for the planning and management of higher education.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The major objective of this document is to identify and categorize program measures. Specifically, the document attempts to identify, describe, and categorize that information which describes the program elements at each level within *Program Measures*. Also, to allow for flexibility in the structuring of information for analysis purposes, alternative schemes of categorizing information are presented.

ASSURANCES AND CLAIMS

Program Measures is intended to aid institutional users of the NCHEMS product by providing the categories of information that describe program elements. This document also provides some alternative suggestions for structuring information for analysis purposes. However, it should not be construed as a manual that describes standardized procedures for conducting analyses; neither is it specifically addressed to program budgeting systems. It is cautioned that the use of *Program Measures* with the PCS does not necessarily assure comparable information.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Program Measures	1	2.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
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James R. Topping
Glenn K. Miyataki

AVAILABILITY

Program Measures is currently available from:
National Center for Higher Education Management Systems
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[illegible]ulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 009

REVISION OF THE PROGRAM CLASSIFICATION STRUCTURE

An update of the 1972 program classification guide providing a more easily implemented system for organizing information and postsecondary education

This product is a *Revision of the Program Classification Structure* (PCS) (National Center for Higher Education Management Systems (NCHEMS), Gulko, 1972) to make it easier to implement and more useful to institutions, States, and Federal agencies. The PCS is basically a standard scheme for organizing information (or measures) about postsecondary education.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The goal of this program is to make the program classification structure easier to implement and more useful to institutions, States, and Federal agencies.

MATERIALS AND EQUIPMENT

To be determined in late 1975.

ASSURANCES AND CLAIMS

The proposed modifications were summarized in a paper entitled "Revisions of the Program Classification Structure" (Collier and Young, 1974), which was distributed to the entire National Center for Higher Education Management Systems (NCHEMS) mailing list for comment and review. This paper also was the major topic of discussion at the participant advisory assembly held in St. Louis in November 1974. Based on these review procedures, the staff made its final recommendations to the NCHEMS Board of Directors.

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Doug Collier

AVAILABILITY

The document "A Discussion of the Revised Program Classification Structure" is currently available from the distributor. (A field review edition of the entire *Program Classification Structure*, incorporating these revisions, will be available late 1975.)

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INFORMATION CURRENT AS OF APRIL 1975 ■

RESOURCE REQUIREMENTS PREDICTION MODEL (RRPM) 1.6

An instructional cost simulation model for all types of postsecondary institutions

The *Resource Requirements Prediction Model 1.6* (RRPM 1.6) is an instructional cost-simulation model for use in all types of postsecondary institutions including community colleges, vocational schools, and large and small 4-year institutions with or without major research activities.

RRPM 1.6 provides institutions with a tool with which to analyze various institutional alternatives for the utilization of a limited set of resources. It may also provide a useful point of departure for those institutions wishing to adapt a cost-simulation model to their own specific institutional needs.

RRPM 1.6 generates information necessary for the preparation of instructional program budgets. Institutional data, either historical or projected, may be put into the model. The model then calculates the program cost information and implied resource requirements to undertake any given series of programs.

The product generates four different types of reports, any or all of which may be requested by the user. These are: (1) Organizational unit reports providing line-item budgets for various organizational units within the institution, (2) program budget reports indicating the discipline or department contributions to various instructional programs, (3) institutional summary reports, and (4) formatted display reports that show all parameter data for the institution.

The starting point for implementation of RRPM is the Induced Course Load Matrix (ICLM), which describes the relationship between disciplines or departments and students in degree programs. Computer programs that construct the ICLM from institutional files are available from the National Center for Higher Education Management Systems (NCHEMS). Additional RRPM data requirements center around faculty-related information. NCHEMS has developed a computer program series called the Faculty Data Generator, which produces required faculty data from institutional files.

In addition to its utility as a historical model, RRPM can be used for interinstitutional historical cost comparison and exchange. If compatible exchange is desired, each participating institution must adhere to strictly defined procedures and definitions. These include definition of primary and support cost centers, definition of what comprises direct and indirect costs, definition of an FTE student, and definition of allocation techniques. Given agreement on these matters, RRPM will produce compatible unit costs by level of instruction, level of student, and field of study.

Whether RRPM is used by an institution for its own purposes or for purposes of exchange and comparison, its ultimate utility is as an aid in planning. While the planning model cannot answer judgmental or value-laden questions, its judicious use can clarify the nature of many thorny decisionmaking problems. RRPM can help planners and administrators ask more pointed questions and get more useful answers.

After having accomplished implementation of RRPM as a direct cost model, the institution may wish to develop a full-unit costing capability. This can be achieved by feeding indirect cost analysis into RRPM, which will then calculate full unit costs.

SUBJECT AREA(S)

The subject areas are postsecondary education planning and management.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to provide a computer simulation model designed to calculate the resources that would be required to operate an institution under varying enrollment levels and operating policies.

IMPLEMENTATION PROCEDURES

RRPM 1.6 programs were developed for multiple vendor computers. To permit the programs to operate in this flexible environment, only American National Standard (ANS) COBOL was used. The use of ANS COBOL, coupled with the incorporation of the COBOL segmentation feature, also facilitates the process of further reducing core requirements.

ASSURANCES AND CLAIMS

In the development of RRPM 1.6, many experimental prototypes were developed, and many concepts were tried and evaluated. Eight participating NCHEMS institutions served as official pilot-test sites for earlier prototypes, and staff from those pilot institutions contributed significantly to the art and science of resource requirements simulation modeling in higher education.

In December 1972, the NCHEMS Technical Council released the Resource Requirements Prediction Model, version 1.6, for general distribution to institutions throughout the country. RRPM 1.6 is intended to supersede all previous NCHEMS cost simulation models (the Cost Estimation Model and RRPM 1.3), since it provides both greater capability and greater user convenience than the earlier versions.

NCHEMS certifies that the RRPM 1.6 programs meet conventional ANS COBOL programing standards and will meet the performance characteristics indicated in the *RRPM 1.6 System Documentation*. If such is not the case, NCHEMS will make appropriate program modifications and distribute such changes to institutions that have earlier versions. NCHEMS will assume no responsibility for other modifications of RRPM 1.6 programs.

The system has certain limitations. The maximum number of organizational units (e.g., disciplines, departments, schools, or degree programs) allowed is 9,999. Although the possible number of organizational units is much greater than 9,999, the limit is due to internal subscripting within the system. The system is designed to accept a maximum of 7 student and course levels, 5 instruction types, 6 faculty ranks, 4 categories of other staff, 7 other departmental expense types, and 9,999 estimating equations relating to noninstructional categories. The system as distributed is limited to 200 disciplines, 100 departments, 50 schools, and 200 majors.

In 1973 NCHEMS undertook a comprehensive survey of American and foreign colleges and universities. The RRPM 1.6 was surveyed with the Cost Estimation Model, which is a predecessor computer-based cost simulation model. Sixty-nine of the three hundred eleven (22.2 percent) responding postgraduate degree institutions with 5,000 or more students indicated they had used at least 1 of these 2 models. Additional colleges and universities were in the process of implementing RRPM 1.6, several others expected to follow in the future.

Approximately 320 institutions have purchased the RRPM 1.6 software package.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Resource Requirements Prediction Model 1.6 Reports	1	1.50	Reusable	
Introduction to the Resource Requirements Prediction Model 1.6	1	1.50	Reusable	
Resource Requirements Prediction Model 1.6 Systems Documentation	1	5.00	Reusable	
Resource Requirements Prediction Model 1.6 Program Listings	1	5.00	Reusable	
A Blueprint for RRPM 1.6 Application	1	1.50	Reusable	

Note: RRPM computer software is available as part of the Costing and Data Management System at a total cost of $150. The first three publications listed above are included in the software package.

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

David G. Clark
Robert A. Huff
Michael J. Haight
William J. Collard
Michael Young

AVAILABILITY

The *Resource Requirements Prediction Model 1.6* is currently available from:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 011

COSTING AND DATA MANAGEMENT SYSTEM

A data management system which provides historical instruction cost studies

The National Center for Higher Education Management Systems (NCHEMS) *Costing and Data Management System* is designed to assist institutions in the implementation of cost studies. There are at least two kinds of cost studies—historical cost studies display cost-related data that reflect actual events over a specified prior time period, and predictive cost studies forecast costs that will be incurred during some future time period. These two kinds of cost studies use different techniques. Historical studies require the identification and aggregation of cost-related data in terms of actual units (e.g., dollars, credit hours). Predictive studies usually represent an institution in terms of historically derived parameters (such as average section size, faculty rank mix) which then are used as the basis for forecasting costs.

The system supports both historical and predictive cost studies—specifically, the cost study program of the *Information Exchange Procedures* (IEP) and the *Resource Requirements Prediction Model* (RRPM) 1.6.

The system is composed of the following modules:

1. Account crossover module (ACM)—A module that processes the accounting information of the institution. It allows information from the institutional accounts to be converted to a common activity structure.

2. Data management module (DMM)—A module that is a storage and manipulation mechanism for information obtained from the account crossover module, personnel data module, faculty activity module, student data module, and student outcomes module.

3. Faculty activity module (FAM)—A module that converts and aggregates the information obtained from the faculty activity and outcomes survey instrument and forwards the information to the personnel data module.

4. Personnel data module (PDM)—A module that processes personnel information to calculate crossover instructions used by the account crossover module, by linking personnel to the accounts from which they are paid and to the tasks which they perform.

5. Student data module (SDM)—A module that processes student registration information in order to determine program costs.

6. Student outcomes module (SOM)—A module that converts and aggregates the information from the "Student Outcomes Questionnaire for Program Completers" and forwards the information to the data management module.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The *Costing and Data Management System* is a software system designed to assist the institution in the implementation of historical and predictive cost studies.

IMPLEMENTATION PROCEDURES

The computer software developed for this system has been used on BURROUGHS, CDC, DEC, HONEYWELL, IBM, UNIVAC, and XEROX systems.

ASSURANCES AND CLAIMS

This software has been pilot tested in institutions around the country and has been purchased by approximately 210 institutions.

The product is a Type I program product. The following description of a Type I program product is contained in the National Center for Higher Education Management Systems (NCHEMS) policies and procedures manual:

"A computer program or system of programs and documentation released under this designation will contain a warranty that indicates the programs meet the programing standards of the center and will perform as the documentation indicates and that NCHEMS will make modifications if this is not the case.

"Recipients of Type I release programs will be maintained on a mailing list and will receive any changes to the software made by NCHEMS. Support will be limited to released versions of the software and does not include user modifications.

"NCHEMS support for software released under type I will include notifications, telephone, and letter correspondence concerning implementation. Users will be notified 12 months in advance of termination of NCHEMS support of any particular product. Onsite implementation assistance for individual institutions will not be provided, but periodic technical workshops will be made available as appropriate."

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
An Introduction to the NCHEMS Costing and Data Management System	1	1.00	Reusable	
Account Crossover Module Reference Manual	1	1.50	Reusable	
Student Data Module Reference Manual	1	1.50	Reusable	
Personnel Data Module Reference Manual	1	1.50	Reusable	
Data Management Module Reference Manual	1	1.50	Reusable	
Faculty Activity Module Reference Manual	1	1.50	Reusable	
Student Outcomes Module Reference Manual	1	1.50	Reusable	
NCHEMS Costing and Data Management System Sample Reports	1	1.50	Reusable	

Note: The *Costing and Data Management System* software is available for $150 and includes all the documents listed.

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Bill Collard
Gary Gamso
Michael Haight
Ron Martin

AVAILABILITY

The software and documentation are available from:
National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 012

DATA ELEMENT DICTIONARY (DED)

A second edition of a guide to assist institutions
and agencies concerned with higher education in
the identification, definition, and collection
of data required for implementation of the NCHEMS
systems

The second edition of the *Data Element Dictionary* (DED II) assists institutions and agencies of postsecondary education in the identification, definition, and compilation of the standard data elements they need for improved analysis, planning, and resource allocation. This publication serves to identify and describe: (1)Those data elements required to support current National Center for Higher Education Management Systems (NCHEMS) products, (2) certain data elements anticipated as being required for further NCHEMS products, (3) certain data elements commonly maintained by institutions for operational and reporting purposes, and (4) certain terms that are needed to help identify institutional characteristics for exchange purposes that are not generally included in an institutional data file.

The *Data Element Dictionary* is divided into five categories: Course, facilities, finance, staff, and student. The data categories and definitions suggested represent common usage except in identified instances. The dictionary does not contain a complete list of data elements that should be included in an institutional data system. Unique institutional requirements will mandate the inclusion of other elements. Since the primary intent of this document is the identification of data elements, many of the data elements specify institutionally defined categories. Appendixes include HEGIS taxonomy, current funds revenue categories, abbreviations, standard format for calendar date, standard room use categories, visa types, and functional classification categories.

SUBJECT AREA(S)

Postsecondary education planning and management

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators

GOAL(S) OR PURPOSE(S)

To identify and to act as a repository for the data elements which will be incorporated in the data bases of the institutions for purposes of planning, management, and information exchange

IMPLEMENTATION PROCEDURES

Although these sections are the final version of the second edition of the dictionary, NCHEMS fully intends to continue to update them in subsequent editions. In fact, this document will be updated regularly during the coming months to reflect the data element definitions that will have been pilot tested in several related NCHEMS projects. Revised pages and sections will be sent to each individual to whom this document has been sent.

ASSURANCES AND CLAIMS

This edition of the *Data Element Dictionary* (DED II) has been developed by the staff of the National Center for Higher Education Management Systems (NCHEMS) in conjunction with members of the DED task force. The five sections composing the dictionary have been reviewed by NCHEMS staff members, the DED task force, the NCHEMS Technical Council, and representatives from all participating institutions to whom the documents were sent for review in early 1973.

The data categories and definitions suggested represent common usage except in those identified instances for which accepted national standards exist, e.g., U.S. postal code abbreviations for States of the United States and ZIP codes. In those few cases where more than one set of categories and definitions are commonly used, alternatives have been provided. The dictionary does not contain the complete list of data elements that should be included in an institutional data system. Unique institutional requirements will mandate the inclusion of other elements. Since the primary intent of this document is the identification of data elements, many of the data elements specify institutionally defined categories. The elements contained in the dictionary are to be regarded as current recommendations by NCHEMS and not as standards for any mandated reporting purposes.

In January 1972, the Business Research Division of the Graduate School of Business Administration at the University of Colorado undertook a study of the impact of the National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education (WICHE) to produce factual information for purposes of program evaluation and review. The information that follows is taken from the analysis by Dr. Charles P. Rahe.

"The *Data Element Dictionary* (DED) has the greatest overall recognition level. All of the systems and coordinating bodies are familiar with it, as are nearly 85.0 percent of the institutions. In general, a high percentage of those not now using . . . the DED plan to do so."

In late 1973, NCHEMS undertook a comprehensive survey of presidents of all institutions listed in the *National Center for Educational Statistics Higher Education Directory* and to all institutional personnel on the NCHEMS mailing list. These 2 groups included approximately 6,300 persons. Responses were received from 1,642 individuals at 1,295 American and 16 foreign institutions. The results of that survey indicate: Of all NCHEMS work to date, the dictionary, the first Center product to become available, has probably received wider use than any other product; of all institutions responding to the questionnaire, 484 (36.9 percent) indicated they have used the *Data Element Dictionary;* and among postgraduate degree institutions with 5,000 or more students, 222, or 71.4 percent, indicated use of the dictionary.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Data Element Dictionary (2d ed.)	1	10.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Suzette Goddard
James S. Martin
Leonard C. Romney

AVAILABILITY

The *Data Element Dictionary* (DED II) was published November 1973 and is currently available from:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 013

NCHEMS GLOSSARY

A collection of basic terminology used in NCHEMS products

The *NCHEMS Glossary* represents a collection of basic terminology used in National Center for Higher Education Management Systems (NCHEMS) products. It has been compiled primarily to assist staff as a vehicle for assuring uniformity in use of terminology in all NCHEMS publications and products. Although definitions in this glossary are not identical to usage in all past projects, they represent the common usage in current projects. In cases where differences in definition exist among projects, these differences have been noted.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

The primary intended users of this product are the National Center for Higher Education Management Systems (NCHEMS) staff. However, it will also benefit anyone seeking definitions of NCHEMS terminology in postsecondary education.

GOAL(S) OR PURPOSE(S)

This product serves to assure consistency of definition and uniformity in use of terminology by NCHEMS staff as well as users of NCHEMS products and publications.

ASSURANCES AND CLAIMS

To insure consistency in future NCHEMS products, these glossary definitions should be considered as standard NCHEMS definitions. Any revisions or new definitions will be centrally monitored at NCHEMS to keep the terminology consistent. This glossary will be updated regularly.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
NCHEMS Glossary	1	13.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Clara Roberts

AVAILABILITY

This product is currently available on request from:
National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 014

POSTSECONDARY EDUCATION ACADEMIC UNIT PLANNING MANUAL (AUPM)

A technique to identify and organize information about academic unit functions and human and physical resources

The *Academic Unit Planning Manual* (AUPM) will assist in planning and managing the scope and direction of an academic unit within a postsecondary education institution. The manual will help in the identification and organization of data about academic unit functions, the availability and allocation of human and physical resources, the sources and uses of funds, and the planning and assessment of outcomes. Included are several analytic techniques that facilitate the examination of alternatives regarding the allocation of resources; for example, the analysis of various faculty/activity assignments, determination of expected student enrollments, and the uses of financial resources.

The planning manual can be used to address such questions as: How much and which kinds of resources will be consumed by the community service activities conducted by the Home Economics Department? What is the expected student demand if a new course in accounting is established? How many students can be expected to take Educ. 550 during fall 1975, and from which departments may they come? What are the planned outcomes of the department? How many faculty are needed to staff adequately the projected teaching, research, public-service, and administrative functions of the unit?

The manual has been designed to be flexible in its use and to rely upon the administrator's experience and judgments in applying the tools to examine various planning situations. It is organized into several "modules," each of which addresses a particular aspect of the overall planning and management process within academic units. Each module consists of worksheets for identifying, organizing, and analyzing data and procedures for helping to investigate a variety of planning and management concerns. The tools and procedures can be and should be modified by academic unit administrators to fit their particular situation.

While implementation of this manual can occur at various levels within an institution, it is designed to focus on the academic department. The academic department is typically an organized unit within a school or college dealing with a specific field of knowledge. For example, the English department typically would be an organized unit within the college of arts and sciences; accounting would be a department within the school of business; and the department of ecology might be an organized unit within the college of engineering. However, it should be mentioned that, in some cases, a school or college might be equivalent to a department, and a division might be analogous to a department. Throughout the manual, "academic unit" is used as a generic term to denote the user's basic organizational unit.

SUBJECT AREA(S)

Postsecondary education planning and management are the subject areas.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators are the intended users.

GOAL(S) OR PURPOSE(S)

The purposes are to improve planning and management within institutions through the development of tools and procedures that will facilitate: (1) The gathering and analyses of information about the resources, activities, and outcomes of academic units; and (2) the examination of alternative allocations of resources within various organizational levels within the institution.

The project intends to provide academic unit administrators with appropriate techniques and information for managing their units.

ASSURANCES AND CLAIMS

At the current stage of development, the manual has been carefully reviewed by:

1. The National Center for Higher Education Management Systems (NCHEMS) staff
2. Several individuals from various postsecondary education institutions throughout the country
3. Paul Dressell, of Michigan State University, and Stephen Hoenack, of the University of Minnesota, as independent technical consultants
4. Administrators from Ball State University and the

University of Minnesota who participated in the field development of the document during July-November 1974.

The document will undergo a pilot test in spring and summer 1975 in a small number of postsecondary education institutions and a mail review by the NCHEMS constituency. The results of the field review and pilot test will be considered and incorporated as appropriate in the manual before it is published in late fall 1975.

It is most important to note that this planning manual does not prescribe standards for academic unit planning, nor does use of the manual imply that information about academic units should be exchanged. Any academic unit that intends to implement this manual for information exchange purposes must establish its own conventions and procedures.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Academic Unit Planning Manual	1	3.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Glenn K. Miyataki
Robert G. Gray

AVAILABILITY

This document is currently available in field review edition. The revised document will be available in fall 1975 from:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

FACULTY ACTIVITY ANALYSIS MANUALS (FAA)

Techniques for collecting data to serve as a foundation for analyzing faculty activities and allocating salaries to instructional programs

The purposes of the *Faculty Activity Analysis (FAA) Manuals* are to provide (1) techniques for collecting data which will serve as a foundation for allocating faculty salaries to instutional programs and (2) standard procedures for analyzing faculty activities.

The manual presents the faculty activity survey instrument and discusses the procedural questions involved in conducting an activity survey. Recommended procedures are given where appropriate. Some of the concerns confronting an institution that is initiating an activity survey are identified and discussed, such as: when the survey should be conducted, whether the institution should sample faculty or conduct a census, what should be the survey time period, what are the alternative methods of administering the survey, and what is the effect of each of these in the resulting data.

Some of the larger issues surrounding a faculty activity analysis are discussed. These include (1) the question of the accuracy and consistency of faculty activity information, (2) the effect altering the survey instrument has upon the resulting data, and (3) the general question of faculty acceptance of an activity survey.

Faculty Activity Analysis Interpretation and Uses of Data suggests and illustrates a variety of faculty activity information display formats and analysis techniques. This document outlines a series of display formats that may be useful for describing the faculty resources at an institution, illustrates by use of a case study the utilization of the faculty activity analysis instrument and instructions, and shows how the resultant data can be analyzed to address important planning and management issues. Finally, the document describes in a general sense the specifications of a software package which the National Center for Higher Education Management Systems (NCHEMS) has developed to process part of the faculty activity data and which is available as part of the *Costing and Data Management System.*

SUBJECT AREA(S)

Postsecondary education planning and management.

INTENDED USERS AND BENEFICIARIES

Postsecondary education administrators.

GOAL(S) OR PURPOSE(S)

(1) To serve as a standard methodology for the categorization of faculty effort and the distribution of faculty effort to the programs in an institution of higher education and (2) to provide a description of how the activity data may be used to support costing, budgeting, and long-range planning and an outline of the software to help the user analyze faculty activity data.

IMPLEMENTATION PROCEDURES

While not necessary, some institutions may find computer access to be desirable.

ASSURANCES AND CLAIMS

This product was developed by the FAA task force and the FAA pilot-test institutions in conjunction with the NCHEMS staff. Several consultants were also involved in the project prior to the formation of the task force.

The procedures manual is intended to aid institutions in conducting a faculty activity analysis which can be used for internal management purposes. This manual does not present specific costing procedures; rather, it displays a management tool that could be used to support a wide variety of different procedures.

The manual makes recommendations about the design of a survey instrument and the procedures for conducting a faculty activity survey. These recommendations should not be considered as standards; they are guidelines for institutions and should be adapted to the particular needs of an institution. The users are also cautioned that using the recommended procedure does not insure comparability of the resulting data among institutions.

The interpretation and uses manual is intended as a guide for analyzing faculty activity data and is aimed primarily at a technical audience responsible for processing and analyzing such data. The contents of the document should be regarded as illustrative only; they are not to be treated as standards, even though they may be included in other NCHEMS documents in which standards and conventional treatments are presented. In this manual, however, prototypes rather than standards are presented. The reader is cautioned that the contents of this manual deal only with the results of faculty activity data, which may be useful in many contexts. Nonetheless, institutional policy, practice, or experience may dictate that such data are not useful for the specific purposes that are suggested here, so that other sources of similar data may be more appropriate.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Faculty Activity Analysis: Procedures Manual	1	2.00	Reusable	
Faculty Activity Analysis: Interpretation and Uses of Data	1	3.00	Reusable	

Note: Computer software is available as part of the Costing and Data Management System at a cost of $150.00.

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

Leonard C. Romney
Charles Manning

AVAILABILITY

The two documents and referenced computer software are currently available from:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 016

STUDENT FLOW MODEL SFM-IA

A tool for analyzing and predicting student flow between fields of study

The *Student Flow Model SFM-IA* is a tool for analyzing the historical movement of students between the various fields of study and student levels in an institution and for estimating the future enrollments in each student program (or field of study) and student level combination in that institution. Modular in concept, the system can be implemented in phases to permit an institution to begin using its results immediately and to incorporate additional levels of analysis as needed and as the required input data become available.

This product can be used alone in an independent analysis of student progression through the institution. Schools also using the *Resource Requirements Prediction Model 1.6* (RRPM 1.6) will find SFM-IA useful in projecting future student enrollments for RRPM cost-projection purposes. In the past several years, many institutions have developed ways to use analytical tools in their planning and management functions.

One of the most important estimates that must be made for projection purposes is the number of students who will be enrolled in each program/student level combination in the future. The SFM-IA is designed to assist in making these projections.

SUBJECT AREA(S)

The subject areas are postsecondary education planning and management.

INTENDED USERS AND BENEFICIARIES

The intended users are postsecondary education administrators.

GOAL(S) OR PURPOSE(S)

The purpose is to develop a computer-based simulation model that utilizes the institution's historical experience of student flow to estimate future enrollment patterns categorized by student levels and major.

IMPLEMENTATION PROCEDURES

The system consists of 17 programs and a number of sort routines. The programs are written in a low-level ANS COBOL. Programs are also written entirely in sections to facilitate the process of reducing core requirements and to assist in distinguishing the various logical functions performed by the system. As distributed by the National Center for Higher Education Management Systems, the SFM-IA will run in a 50K partition in an IBM OS or DOS environment.

ASSURANCES AND CLAIMS

The product has been developed with the advice of the Student Flow Model Task Force and has been pilot tested at five institutions. This software has also been distributed to 26 schools that were not part of the pilot test. In addition to the task force members and formal pilot-test institutions, several individuals and institutions have provided valuable feedback during the development of the system.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student Flow Model SFM-IA: Introduction	1	3.00	Reusable	
Student Flow Model SFM-IA: System Documentation	1	4.00	Reusable	
Student Flow Model SFM-IA: Reports	1	2.00	Reusable	
Student Flow Model SFM-IA: Software	1	150.00	Reusable	

DEVELOPER/AUTHOR:

National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

John C. Busby
Richard S. Johnson

AVAILABILITY

These documents and software are available from:
National Center for Higher Education Management Systems
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colo. 80302

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 017

ACCOUNTABILITY IN HIGHER EDUCATION, REPORT NO. 1

A summary of trends in accountability and a bibliography of the accountability literature of the 1970's

This paper is an overview of accountability in higher education and considers it in three major contexts: Managerial accountability, accountability versus evaluation, and accountability versus responsibility. The increasing pressures to be more accountable to external focuses such as executive agencies and the public are examined, as well as the question of accountability within institutions themselves. Three major difficulties in assessing internal accountability are discussed: (1) The weaknesses of academic authority result in increased pressures to codify the faculty-administrative relationship, (2) lack of clearly defined goals and objectives are frequently matched with proposals to hold institutions more accountable through certain management techniques and by increased emphasis on student learning, and (3) organizational complexity of colleges and universities often results in proposals for centralized decisionmaking structures that are not sufficiently aware of legitimate demands for accountability. Also considered are some possible trends in accountability for the 1970's. An extensive bibliography is included.

SUBJECT AREA(S)

An overview of accountability, definitions of the various terms used in discussing accountability, difficulties in assessing internal accountability, possible trends in accountability, and an extensive bibliography comprise this 60-page report.

INTENDED USERS AND BENEFICIARIES

Potential users of this monograph include institutional policymakers and decisionmakers, State and Federal agencies, and all others concerned with accountability.

GOAL(S) OR PURPOSE(S)

This monograph serves as a summary of the literature on accountability for policymakers and decisionmakers at all levels. It also serves as a source of up-to-date information on the arguments, positions, and most desired practices on the topic of accountability.

A second use for this monograph will be as a supplementary text for students in higher education.

PATTERNS OF USE

This review is read by those who will make decisions and form policy about higher education; it will be used as a guide and also as a jumping-off point to expand into further programs or research on accountability. As an indication of this report's topicality, 1,702 copies of this report have been sold.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Higher Education
One Dupont Circle NW., Suite 630
Washington, D.C. 20036

American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

Kenneth P. Mortimer, Author

AVAILABILITY

Order No. ED 058 465, $0.76 (microfiche), $3.32 (paper), add $0.26 (postage). Order from:
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P.O. Box 190
Arlington, Va. 22210

Copies are also available for $3 from the developer:
American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 018

COMMUNITY COLLEGES RESPOND TO ELDERS: A SOURCEBOOK FOR PROGRAM DEVELOPMENT

A guide to developing and implementing educational programs for the elderly

This sourcebook is a program planning guide aimed at community college administrators and other interested educators to assist them in developing and implementing educational programs for elders. The sourcebook provides an examination of the changes in the nature of the older adult population and the impact of these changes on the educational needs of elders. The capability and potential of education, in general, and community colleges, in particular, to meet these changing needs are analyzed.

The core of the sourcebook is the presentation of a model of educational program development for elders providing specific guidelines on needs assessment, outreach and recruitment, selection of program content, maximization of resources, and funding. The model identifies and describes an inclusive process of program development which involves elders in active roles as initiators, planners, organizers, and instructors, rather than as students only. This model is based on the project's finding that elders' involvement in the process of program development is a crucial factor and is as important as the resulting program content. Sample core curriculums for elders in the areas of enrichment, retirement planning, advocacy, and retraining for second careers are provided with the model. Also, case studies of colleges using similar inclusive processes of program development are included with a general state-of-the-art report on current community college programs for elders.

SUBJECT AREA(S)

The sourcebook contains five chapters as follows:

I. Introduction. Background on the changing characteristics of older adult populations.

II. Aging and education. An examination of the educational needs of elders and the potential of education, in general, and community colleges, in particular, to work with elders to develop new options for the retirement period.

III. Current programs. A "state-of-the-art" report on current community college programs for elders and two indepth case studies of program development.

IV. An inclusive model of educational program development for elders. Taking the initiative; forming an alliance; assessing needs; selecting program content; insuring program effectiveness; and maximizing manpower, finances, and other resources.

V. A glimpse of the future. Implications for program development.

Appendixes. Additional case studies, listing of resources, annotated bibliography, and colleges surveyed for project.

INTENDED USERS AND BENEFICIARIES

The sourcebook is aimed specifically at community college administrators and, more generally, administrators and educators in other educational institutions who are interested in developing programs for elders. Other potential users would be instructors of older adults, professionals working with elders, and elders themselves. Both elders and education will be ultimate beneficiaries of the increased involvement and participation of this segment of the population.

GOAL(S) OR PURPOSE(S)

This sourcebook is intended to serve as a working tool and practical guide to administrators and educators in planning and implementing educational programs for elders.

PATTERNS OF USE

The sourcebook can be used by college administrators who currently have no programs for elders and who are interested in finding out how to begin to develop such programs and what options and programs are possible and feasible. The sourcebook can also assist administrators who currently have programs for elders and who are interested in expanding into other areas of program content or who are concerned with making more effective use of existing resources or obtaining further resources.

DEVELOPER/AUTHOR:

Massachusetts Association of Older Americans, Inc.
110 Arlington St.
Boston, Mass. 02106

Lillian L. Glickman
Benjamin S. Hersey
I. Ira Goldenberg

AVAILABILITY

Community Colleges Respond to Elders: A Sourcebook for Program Development will be available in summer 1975 from:

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 170 019

COMPETENCY-BASED EDUCATIONAL PROGRAMS IN HIGHER EDUCATION

Summary of status of developments in competency-based programs

This paper will assess the status of developments concerning competency-based programs in higher education. Some evaluations of the number and types of programs will be included. Information concerning success of programs, acceptance by faculty and students, and potential for continued development will be summarized.

SUBJECT AREA(S)

This review will cover developments in competency-based programs in higher education, including evaluations, success of programs, acceptance of programs, and their continued potential for development.

INTENDED USERS AND BENEFICIARIES

The intended audience of this report includes faculty members and academic administrators in all disciplines. Researchers and planners considering the implementation of a competency-based program will also find it useful.

GOAL(S) OR PURPOSE(S)

The goal of this review is to present a concise report of the developments in competency-based education, to evaluate competency-based education, and to outline its future.

DEVELOPER/AUTHOR:

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One Dupont Circle NW., Suite 630
Washington, D.C. 20036

American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

David A. Trivett, Author

AVAILABILITY

Competency-Based Educational Programs in Higher Education **will be available from the developer. Cost is undetermined at this time.**

American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 020

COMPUTERIZED DATA SOURCES FOR HIGHER EDUCATION

A summary of available data sources, definitions, and methods of access

Today, with the development of computerized data banks, there is an increased quantity of stored information relevant to problems far beyond the scope of the original study for which the data were developed. The format of this paper is to indicate specific data sources, to describe the contents of these data, and to identify a contact that may be used to find out more about the use of these data. The sources are divided into the following areas: General survey data, financing data, and nonstatistical data. A 20-item bibliography is included.

SUBJECT AREA(S)

This 4-page pamphlet indicates data sources, describes the contents of the data, and identifies a contact that may be used to find out more about the use of these data.

INTENDED USERS AND BENEFICIARIES

Practitioners and researchers in higher education who are interested in the availability of major data bases will profit from this pamphlet.

GOAL(S) OR PURPOSE(S)

The purposes of this paper are to indicate data bases and to describe data content.

DEVELOPER/AUTHOR:

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Jonathan D. Fife

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 021

A CONCEPTUAL REVIEW OF EXPERIMENTIAL LEARNING IN HIGHER EDUCATION

A critical review of the conceptual literature on experimential learning

This paper will develop a conceptual statement on the relationship of experiential learning to academic programs of higher education. It will provide a critical review of the conceptual literature available on experiential learning (including internships, field work, and service-learning), and develop a broadly defined conceptual statement on experiential learning. The focus of the paper will be on undergraduate education. Various types of programs will be identified and classified according to the scheme developed. The current status and potential direction of each of these programs will be assessed. Finally, implications for experiential learning in the future of higher education will be outlined.

SUBJECT AREA(S)

This monograph will cover experiential learning and its many facets (internships, field work, and service-learning). Various types of programs will be identified and the current status and direction of each will be assessed. Implications of experiential learning for the future will be outlined.

INTENDED USERS AND BENEFICIARIES

Policymakers, researchers, teachers, and students interested in experiential learning will benefit by reading this monograph.

GOAL(S) OR PURPOSE(S)

The goals of this monograph are: (1) To present a review of the present experiential learning programs, (2) to analyze these programs, (3) and to discuss implications for the future.

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American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

Richard Ungerer, Author

AVAILABILITY

The cost of this monograph is undetermined at this time. The monograph will be available from:

American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 022

CONCERNS OF HISTORICALLY AND DEVELOPING BLACK INSTITUTIONS: A BIBLIOGRAPHY

A bibliography of ERIC materials on various aspects of black institutions

This annotated bibliography covers documents and journal articles dating from 1969 that have been announced in the ERIC system. The reports are organized into 11 categories: (1) "General Discussions on Black Colleges and Students," (2) "Federal Support to Black Colleges," (3) "Admissions, Recruitment, and Student Financial Aid," (4) "Administrative Planning and Management," (5) "Curriculum Development, Planning, and Innovative Instruction," (6) "Faculty Issues," (7) "Interinstitutional Cooperative Programs," (8) "Institutional Research," (9) "College-Community Relationships," (10) "Student Services: Counseling, Guidance, and Placement," and (11) "Libraries." For each document, the author gives the ERIC classification number, author, title, publication date, number of pages, and an abstract. Journal articles are selectively annotated.

SUBJECT AREA(S)

Various aspects of black institutions including Federal support, admissions and recruitment, planning and management, and curriculum

INTENDED USERS AND BENEFICIARIES

The product was developed with the membership of the Consortium of Southern Teacher Educators in mind and is also intended for nonmember institutional personnel in historically black institutions.

GOAL(S) OR PURPOSE(S)

This bibliography references ERIC materials in order to stimulate utilization of the literature for experimentation and program improvement.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Linda J. Lambert

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INFORMATION CURRENT AS OF APRIL 1975 ■

1265

RD 170 023

FACULTY WORKLOAD: FACTS, MYTHS, AND COMMENTARY

A description of the state of the art of faculty workload measures

This monograph examines methods by which faculty workload studies can be performed. It includes definitions and discussions of activities used in workload assessment, such as instructional time, institutional and public service, personal activities, and research, scholarship, and creative endeavors. The author concludes that there is a paucity of empirical data about faculty workloads and too much acceptance of commonplace assumptions that do not stand up to critical examinations. The author believes that faculty workload formulas will vary among institutions and that individual institutions should develop their own faculty workload questionnaires.

SUBJECT AREA(S)

This 69-page monograph covers the concept of faculty workload, the measurement of faculty workload, workload categories, methodologies and procedural problems, factors that may influence teaching load, computing total faculty workload, and distribution of faculty worktime.

INTENDED USERS AND BENEFICIARIES

This paper is directed to all persons who are concerned with productivity, accountability, and collective bargaining.

GOAL(S) OR PURPOSE(S)

In addition to synthesizing the relevant literature on faculty workloads, the intent of this report is to increase the readers' awareness of the alternatives in measuring faculty productivity.

DEVELOPER/AUTHOR:

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One Dupont Circle NW., Suite 630
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American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

Harold E. Yuker

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 024

HIGHER EDUCATION AND THE STEADY STATE

An examination of the response of postsecondary educational institutions to declining enrollments

This paper examines the no-growth phenomenon in higher education. A framework is presented for viewing what is occurring in higher education as it seeks to resume a dynamic state of growth. Borrowing from Schumpter's five categories of innovations by which business firms seek to gain a competitive edge over their rivals, an analytical framework is developed, and the current activities of higher education institutions and agencies vis-a-vis no-growth activities are examined. The authors conclude that higher education is attempting new products, new methods of production, new markets, and new productive factors, and is reorganizing and restructuring the enterprise.

SUBJECT AREA(S)

This 65-page monograph defines "no growth" in higher education, discusses enrollment in relation to no-growth as well as American higher education in a period of readjustment to no-growth. It includes a discussion of opening new student markets and new products; employing new sources of supply or production factors; and developing, reorganizing, and restructuring higher education.

INTENDED USERS AND BENEFICIARIES

Everyone who is concerned with the development of higher education in the forthcoming years should find this paper of interest. In particular, those institutions that are already in a declining or no-growth situation will find this paper of special interest.

GOAL(S) OR PURPOSE(S)

The general conceptual framework developed in this monograph should aid those institutions now experiencing the no-growth phenomenon to plan effectively for their future.

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Larry L. Leslie and Howard F. Miller

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 025

INFORMATION CENTERS IN HIGHER EDUCATION

An overview of resource centers which exchange noncomputerized data concerning postsecondary education

Across the country there exist invaluable resources to all those who are involved with administering, or planning for, institutions of higher education. These resources include the variety of clearinghouses and information centers that have been established to collect and disseminate the most recent data concerning specific higher education problem areas. These centers can help an institution maximize its resources and its staff productivity by keeping the institution informed about the current developments and experiences of other institutions. The paper highlights some of the various resource centers that are involved in the exchange of noncomputerized data concerning higher education. These centers are involved in the collection and dissemination of papers, exchange of ideas, and identification of knowledgeable people who can aid institutions in finding solutions to some of their problems.

SUBJECT AREA(S)

This paper will highlight some of the various resource centers that are involved in the exchange of noncomputerized data concerned with higher education.

INTENDED USERS AND BENEFICIARIES

All administrators and researchers who are involved with administering or planning for institutions of higher education are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to identify the various resource centers that are involved in the exchange of noncomputerized data concerned with higher education.

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 026

LIFETIME LEARNING: EXTENDING AVAILABILITY OF EDUCATION BEYOND COLLEGE AGE

Recent developments, prospects, and potential problems of extending higher education beyond the traditional student age group level

One of the major current themes in higher education is the extension of opportunities beyond "college age." Lifetime learning is consistent with the goal of widening access and also is relevant to the problems of declining enrollment. This review considers recent developments and prospects, as well as potential problem areas in the future. It will be broad in scope and will examine a variety of issues, including shifts in the types of programs offered, concerns for academic standards, and financing.

SUBJECT AREA(S)

This review will consider recent developments in lifetime learning, as well as future problem areas in this field. It will examine a variety of issues, including shifts in types of programs offered, concerns for academic standards, and financing.

INTENDED USERS AND BENEFICIARIES

Policymakers concerned with lifetime learning, researchers, teachers, and students of higher education will find this review of interest.

GOAL(S) OR PURPOSE(S)

The goal of this review will be to present a concise review of the recent developments in lifetime learning and consider some problems for lifetime learning programs in the future.

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Carol H. Shulman, Author

AVAILABILITY

Lifetime Learning: Extending Availability of Education Beyond College Age will be available from the developer. Cost is undetermined at this time.

American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

INFORMATION CURRENT AS OF MARCH 1975 ■

1269

RD 170 027

THE PERSONALIZED SYSTEM OF INSTRUCTION: AN EDUCATIONAL ALTERNATIVE

A detailed monograph tracing the history of the personalized system of instruction

Over the past decade, momentum has been gathering for the development and application of a variety of approaches to the instructional process that emphasize mastery and self-pacing by the student. Included in this report are approaches to this problem, such as programed instruction, computer-aided instruction, and individually prescribed instruction. This review considers one such approach that is being used more and more widely in higher education, the Personalized System of Instruction (PSI). The paper describes the brief history of PSI and its basic conceptual ingredients and provides an indepth look at a typical PSI classroom. It also reviews research that compares PSI to more traditional forms of instruction, identifies information programs and knowledgeable individuals, and speculates on the future of PSI.

SUBJECT AREA(S)

This 50-page monograph describes the history of the Personalized System of Instruction (PSI), its basic conceptual ingredients, and a PSI classroom. Review research comparing PSI to traditional instruction is presented, along with information programs and speculation on the future of PSI.

INTENDED USERS AND BENEFICIARIES

This monograph is for faculty and students who are not currently involved with or knowledgeable about individualized instruction, as well as administrators who are concerned about the economies of individualized instruction.

GOAL(S) OR PURPOSE(S)

The purpose of the monograph is to encourage wider use of this approach to instruction and to contribute to information exchange about PSI among current researchers in this area.

DEVELOPER/AUTHOR:

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American Association for Higher Education
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Washington, D.C. 20036

Robert S. Ruskin

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INFORMATION CURRENT AS OF MARCH 1975 ■

12.9

RD 170 028

STATE AID TO PRIVATE HIGHER EDUCATION, REPORT NO. 3

A summary of proposed legislation for State support of independent postsecondary institutions

Recent public interest in the unique financial problems of private higher education has resulted in proposals and legislation for State support of independent institutions. Although public assistance alleviates the private colleges' financial problems, it also obligates them to increase State supervision of their activities. Several State boards and independent associations believe the private sector's problems warrant special concern and action. Reflecting this view, the reports and position papers listed in this bibliography generally agree on the necessity for State funding of private higher education. They affirm the importance of maintaining an independent sector and of a State's special responsibility for all higher education institutions within its borders. These convictions are supported by proposals for both student and institutional assistance. Beyond funding, there remains the question of the long-range impact these proposals will have, if implemented, on the distinctive qualities of the private institution.

SUBJECT AREA(S)

The State's interest in private higher education, methods of aid, and problems created by the State-private college relationship are examined and analyzed in this 43-page report. An annotated bibliography is included.

INTENDED USERS AND BENEFICIARIES

This report was designed to be used by administrators in the field of financing in higher education.

GOAL(S) OR PURPOSE(S)

This monograph is designed as a summary of the literature on the private college and the State to help policymakers and decisionmakers at all levels gain perspective on the issues. It is a literature review for researchers and a textbook for students of higher education.

PATTERNS OF USE

The annotated bibliography provides users with valuable data on financing private higher education. The material will be useful in preparing new institutional assistance provisions and legislation.

ASSURANCES AND CLAIMS

A note was received from the Department of Health, Education, and Welfare stating that this monograph will be used as a foundation to develop new institutional assistance provisions in the higher education bills.

DEVELOPER/AUTHOR:

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American Association for Higher Education
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Carol H. Shulman, Author

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 029

STRATEGIES FOR IMPROVING COLLEGE TEACHING, REPORT NO. 8

Techniques to improve and reform college instruction

This report considers a variety of ways to improve or reform college instruction. The methods discussed vary from those that would attempt to change what the teacher does to those that would change primarily what the student does. The particular way chosen to improve instruction depends upon the underlying philosophy of education. At one extreme, there are those who believe that the teacher's role is to help pass on a body of knowledge to students. While students are expected to put forth effort, much responsibility for what students learn rests generally with the teacher. Improving teaching often means finding ways to improve such things as the organization of the course and the teacher's classroom performance. At the other extreme, there are those who believe that the responsibility for learning rests with the student and that the teacher functions as a manager or facilitator of learning who directs and motivates students when necessary. Improvement of this latter instance means helping the teacher to both develop and implement whatever techniques will cause students to learn more. In sum, the strategies for improving college teaching presented in this report, like the various roles for the teacher, cover a wide spectrum.

SUBJECT AREA(S)

This 56-page report consists of an overview and a teaching and learning model; discusses research implications for teaching and learning; and considers self-analysis and teaching improvement, the impact of student ratings on teaching improvement, the institutional programs for teaching improvement, and technological impact of teaching improvement. The report also includes an extensive bibliography.

INTENDED USERS AND BENEFICIARIES

The report was meant to be used by practitioners in the field of teaching, researchers, and all those who evaluate teachers and teaching; e.g., department chairpersons, deans, and administrators.

GOAL(S) OR PURPOSE(S)

This report was designed to present the groundwork on the issue of improving instruction. As such, it may be used as a basis for implementing teacher improvement programs.

PATTERNS OF USE

The report is to be read by administrators, teachers, teacher evaluators, and students in higher education as an aid in implementing instructional improvement programs, either formal or informal.

DEVELOPER/AUTHOR:

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John A. Centra, Author

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 030

TIME SHORTENED DEGREES

Historical background, benefits, and criticisms of degrees obtained over a shorter than usual period of time

This monograph examines the many aspects of time-shortened degree programs, using both a critical and analytical framework. It is shown that the 3-year baccalaureate programs are not a recent idea and that the use of the idea depends largely on a willingness not to view the 4-year degree as something sacrosanct. While there are some dangers inherent in time-shortened degrees, which are presented, the author believes that the issue of time-shortened degrees is only one part of the larger concern about the direction contemporary education should take and that new ideas about accommodating the perceived needs of secondary school students and the adult learner will have an impact in this area.

SUBJECT AREA(S)

This 82-page monograph provides a historical background, the benefits and the criticism of time-shortened degrees, including approaches to time shortening and an analysis of the approaches.

INTENDED USERS AND BENEFICIARIES

Those institutions and individuals who are concerned about reaching students and who wish to make their curriculums more accessible would find this monograph of interest.

GOAL(S) OR PURPOSE(S)

The purposes of this monograph are to develop new programs which can benefit from the experiences of the older programs and to serve as a base for further research in this innovative field.

DEVELOPER/AUTHOR:

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American Association for Higher Education
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Washington, D.C. 20036

Charles W. Meinert

AVAILABILITY

Copies of this monograph are available at a cost of $3 for nonmembers and $2 for members from the developer:
American Association for Higher Education
One Dupont Circle NW., Suite 780
Washington, D.C. 20036

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 170 031

URBAN INTERNSHIPS IN HIGHER EDUCATION, REPORT NO. 9

A paper on the objectives and goals of internship programs

This paper focuses on the objectives of internship programs, role allocation, and issues and problems associated with this form of experiential education. Goals and objectives of internship training are reviewed in relation to the student as primary beneficiary, the university interest in internship programs, and benefits to the host agency. Role allocation concerns, the system of university values and incentives, faculty role, student role, and the host agency are also discussed. Additional issues discussed include who should participate, where students should intern, compensation practices, and evaluating intern performance. A 40-item bibliography is included.

SUBJECT AREA(S)

This 44-page report includes objectives and goals of internship programs, role allocation, faculty role, student role, and host agency role.

INTENDED USERS AND BENEFICIARIES

This monograph is primarily for faculty members and administrators in colleges and universities, as well as internship directors in noneducational institutions.

DEVELOPER/AUTHOR:

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Donald G. Zauderer

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INFORMATION CURRENT AS OF MARCH 1975 ■

SOCIAL EDUCATION/ SOCIAL SCIENCE

1275

OVERVIEW

JOHN D. HAAS
University of Colorado
Boulder, Colorado

The nature of society and the social studies curriculum

Public school curriculums grow out of the peculiar nature of the society in which the schools exist. The schools and curriculums in China, Chile, Russia, and America are reflections of the larger society in each nation. The values of the nation/state manifest themselves in its public schools—in curriculums, in instructional behavior, in organizational patterns, in ways of treating students and subject matter.

In societies where there is widespread agreement on core values, or in authoritarian societies, those responsible for planning and developing curriculums have a relatively easy task. In such nations, guidelines and directives emanating from the national government are both prescriptive and proscriptive. Little is left in doubt; little in the way of choice is allowed.

The curriculum planners face formidable tasks, however, if a society is pluralistic in its values and commitments, and operates within a democratic framework calling for citizen participation in decisionmaking at many government levels. In short, educators in democratic societies are confronted with an array of dilemmas in deciding on clear criteria or rationales for public school curriculums. This is especially true for those educators responsible for curriculums in social science and social education.

A rationale for social studies education should confront the difficult issues which emerge from the values of a democratic society. Some of these issues are:

- Nationalism versus Internationalism
- Individualism versus Fraternalism
- Human Dignity versus Oppression
- Humanism versus Materialism
- Religion versus Secularism
- War versus Peace
- Energy and the Environment versus Conspicuous Consumption
- Developed Nations versus Developing Nations
- Affluence versus Poverty

Social studies rationales should also provide definitions of (positions on) such value concepts as democracy, freedom, equality, and social order.

Social studies and social science education

As one would expect, social studies educators differ as to the rationales they advocate and defend. One dimension of disagreement in rationales concerns the issue of *social studies* education versus *social science* education. Wesley and Wronski assert that "in contrast with the social sciences, the social studies are designed primarily for instructional purposes. They are those portions or aspects of the social sciences that have been selected and adapted for use in the school or in other instructional situations." This point of view sees the social studies as primarily an organizing concept for including or excluding certain knowledge from certain academic disciplines. It becomes crucial, therefore, which disciplines (or aspects of disciplines) are viewed as contributing to social studies curriculum—that is, which disciplines or subjects comprise the social sciences. Should the social studies educator draw content and processes from economics for use in the social studies curriculum? from history? philosophy and theology? psychology and social psychology? both physical and cultural anthropology?

If one views the social studies as simplified versions or portions of the social sciences, one assumes that social studies, as a term, is plural in nature, a collection of related pieces: "The social studies *are* . . ."

Other social studies educators consider this broad curricular field to be singular in nature, a separate discipline in itself—even though it is secondarily dependent on knowledge from the social sciences. Shaver states that a definition of social studies education "should begin with clear recognition that social studies education is general education. [Social studies education is] that part of the school's general education program which is concerned with the preparation of citizens for participation in a democratic society."

Content and process in social studies education

Another dimension which yields differences in social studies rationales is that of content versus process. Some educators claim that the significant content in social studies courses should be those valid generalizations and advanced organizers (concepts) which provide useful explanations (and predictions) of human social behavior. Others argue that, given a knowledge explosion and information overload, the most useful knowledge is that of processes or ways of knowing. The advocates of content stress high-mileage concepts and generalizations, while proponents of process stress learning to learn and to think. The former focuses on the known, the latter on knowing.

Three traditions in social studies education

Over the years, there have been at least three traditions with respect to rationales for social studies education. (This discussion of three traditions draws on an article by James L. Barth and S. Samuel Shermis: "Defining the Social Studies: an Exploration of Three Traditions," *Social Education*, vol. XXXIV, No. 7 (Nov. 1970).)

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These three traditions or schools of thoughts are: (1) Social studies as citizenship transmission (or transmission of the cultural heritage), (2) social studies as social science (or knowing concepts, generalizations and modes of inquiry from the spectrum of the social sciences), and (3) social studies as reflective inquiry (or knowing how to think, learn, and decide). Each tradition views differently questions of purpose, content, and method. Further, implicitly or explicitly, they differ in their conceptions of society and democracy, in the learning theories they accept or reject, and in the normative views they hold of the nature of man and, in particular, of children and adolescents.

What the three traditions do have in common are "a set of goals which describe how the content of citizenship education is to be selected, organized, and taught" and "a conception of citizenship."

Social studies as citizenship transmission. This position has the weight of tradition behind it. Its content is drawn from the cultural heritage as selected by the consensus majority and based on prevailing interpretations and values which have stood the test of time. As one might expect, history (as manifested in the writings of the "great" consensus historians) is the core academic discipline to this rationale. Traditional values (as distinguished from emergent values) are the bases for determining desirable student (i.e., citizen) behavior. When national and local community values conflict, this school of thought would probably resolve the confrontation by asserting that the local community values are the preferred interpretations and manifestations of national values.

Citizenship is conceived as conformity to local/national norms and as obligation to preserve and conserve, to obey and accept "historical imperatives," and to behave "responsibly" at all times. The knowledge needed by the effective citizen is that which leads to loyalty to the Nation, to patriotic fervor, and to support of societal institutions. Such knowledge must be perennial, validated by its survival over the centuries, and, therefore, firmly established in the folk wisdom.

Educators advocating this position would most probably suggest that effective teaching methods are historical narrative and exposition, description of present-to-past-to-present social conditions (with emphasis on continuity), and persuasive appeals to students to adopt traditional values.

Social studies as social science. The focus of this tradition is on the spectrum of the social science disciplines (usually including history), which have emerged since the turn of the century as a viable academic grouping "fitting" somewhere "between" the sciences and humanities. There is no consensus as to which academic disciplines should be included in the social sciences. Many historians feel that their discipline because of its lack of a specialized jargon and theoretical structure and because of its comprehensiveness, integrating nature, and philosophical bent is more appropriately categorized as a humanity. Many physical anthropologists and physical geographers, because their disciplines rely so heavily on the theory and methodologies of the physical sciences, feel that their disciplines should be considered sciences rather than social science.

What then is a social science? A broad definition is that a social science is an academic discipline which systematically studies behavior, phenomena, and events which occur in human social environments. Such a definition is broad enough to include the following disciplines as social sciences:

- Anthropology (both social or cultural anthropology and physical anthropology)
- Economics
- Geography (both cultural and physical)
- History
- Law
- Political Science
- Psychology
- Social Psychology
- Sociology

Of course, depending on one's preferences or biases, such disciplines as philosophy, theology, and cybernetics might be added to the above list. On the other hand, if one substitutes "studies scientifically" for "studies systematically" in the definition of a social science, then the list might be restricted to anthropology, economics, geography, political science, psychology, social psychology, and sociology.

This rationale position hinges on two assumptions: (1) That the effective citizen requires reliable knowledge in the social realm in order to make informed decisions; and (2) that the best knowledge available are the concepts, generalizations, and modes of inquiry found in the social sciences. Once the social sciences are defined, the spectrum of disciplines to be included are identified, and the concepts, generalizations, and modes of inquiry with the most utility are selected, one has the superstructure for creating a social studies curriculum.

If students behave in the reasoned and scientific ways in which social scientists go about their work as social scientists, students will be better persons in their personal and social lives. Further, if students can view dispassionately social reality through many disciplinary lenses, they will not be plagued by the myopia of the single discipline interpretation.

The most popular and succinct statement defining this position is that of Wesley and Wronski who assert that "the social studies are designed primarily for instructional purposes. They are those portions or aspects of the social sciences that have been selected and adapted for use in the schools or in other instructional situations."

Proponents of the "social studies as social science" tradition differ as to what teaching methods are most appropriate. Some suggest that after the "high mileage" concepts, generalizations, and modes of inquiry have been selected, any method of communicating this knowledge is appropriate as long as it results in students' learning the crucial set of knowledge, skills, and attitudes. To this group, choice of method is purely pragmatic.

Others argue that the modes of inquiry used by social scientists (historical method, scientific method, case study, survey, etc.) should also be modes of instruction. Both teachers and students should employ modes of inquiry as styles of teaching and learning. They place the learning of inquiry skills as the medium for learning the selected concepts and generalizations and for learning the attitudes of social sciencing (rigorous analysis, tentativeness of findings, healthy doubt and skepticism, etc.). Thus, the classroom and community should become the laboratories for students' social science experiments and investigations.

Social studies as reflective inquiry. In regard to this tradition, Barth and Shermis make the point that "although reflective inquiry owes much to the method of inquiry that has obtained among social sciences, there are important differences" between social sciencing and social studies as reflective inquiry. Perhaps the use of the term *inquiry* in descriptions of both traditions is misleading. This third school of thought might better be titled "Social studies as reflective thinking and decisionmaking." The distinctions to be made are that the ways of the social scientists are limited in comparison to the multitude of ways of knowing used by laypersons, citizens, political leaders, and others who are not in the guilds of the social scientists; and that the results of social scientists' investigations are conclusions and generalizations which too often cannot be readily applied to social problems and are of limited value to decisionmakers citizens and leaders.

The sources for this rationale position are general processes of thought: Learning-to-learn skills, decisionmaking models, critical thinking paradigms, policy formation procedures, consensus building techniques, personal awareness and growth strategies, and intercultural and interpersonal human relations perspectives. "Citizenship is defined not as a precommitment to a given set of community norms or values but as a process." In this view, "citizenship means that students acquire practice in making decisions which reflect significant social problems and which presently affect them or are likely to affect them."

The teaching methods advocated for this tradition are an amalgam of exposition, discussion, values clarification, and inquiry. In short, the teaching methods are the mirror images of the processes to be learned: inquiry (or reflective thinking or critical thinking) is both teaching model and learning model. "Inquiry as a method means that a teacher and his/her students will identify a problem that is of considerable concern to them and to our society and the relevant facts and values will be examined in the light of criteria."

The three traditions and four current rationales

The three broad traditions of social studies as citizenship transmission, social studies as social science, and social studies as reflective inquiry emerge from the historical evolution of this broad field in the American public school curriculum. Today there seem to be at least four discrete rationales being advocated by social studies educators, derived from the writing of the leaders in social studies education specifically from articles in journals in the field and from social studies methods textbooks for both preservice and inservice teachers. Of course, there is bound to be some overlap with the Barth and Shermis three traditions synthesis.

These four discrete rationales may be viewed as points on a continuum which extend from the single core discipline (history), to the multidiscipline concept (social sciences), to two variants of the new, separate discipline approach. Each of these points along the continuum can be identified with particular advocates who can be grouped under a single rationale position. The chart which follows depicts the four rationales, the leading advocates for each rationale, and the relationship between each rationale and the three traditions described by Barth and Shermis.

Rationale	Advocates	Relation To Three Traditions
History: Integrating discipline for the social studies	Mark Krug Alan Kownslar	Mainly to social sciences as citizenship transmission. Partly to social studies as social science.
Structures of the social sciences: Concepts, generalizations, and modes of inquiry	Edwin Fenton Barry Beyer Irving Morrissett Lawrence Senesh	Mainly to social studies as social science. Slightly to social studies as citizenship transmission.
Reflective/critical thinking: Concepts, issues, and valuing	Shirley Engle Robert Ennis Maurice Hunt and Lawrence Metcalf	Mainly to social studies as reflective inquiry. Partly to social studies as social science.
Analysis of public issues: Valuing and thinking	Donald Oliver Fred Newman Harold Berlak James Shaver	Mainly to social studies as reflective inquiry.

SOCIAL SCIENCE/ SOCIAL EDUCATION

Although one could argue convincingly for anthropology or sociology as the choice of a social discipline to serve as the core or integrating nexus for the development of a social studies curriculum, tradition, nationalism, and the preference for continuity and stability in a society have made history the keystone in single subject approaches. This rationale may be called "History: Integrating Discipline for the Social Studies."

Equality of emphasis across a spectrum of social science disciplines, a multidisciplinary view of social reality, is a recent approach to social studies education which may be titled "Structures of the social science: Concepts, generalizations, and modes of inquiry."

During the past 50 years, some social studies educators have claimed that, although one must borrow from and indeed must be indebted to the social sciences, the social studies *is* a separate, distinct applied discipline. Social studies *is* not merely the selection from and application of knowledge in the social sciences, but *is* a different entity—different in scope, use, and nature. A likely analogy might be that social studies is to the social sciences what engineering is to mathematics, physics, chemistry, and other "pure" or "basic" disciplines. This separate discipline orientation has spawned two variants which one can label "Reflective/critical thinking: Concepts, issues, and valuing" and "Analysis of public issues: Valuing and thinking." Both draw heavily from the literature of skill or process learning and from the actual or potential conflicts which are inevitable in democratic, pluralistic societies. The first emphasizes process, controversial issues, and selected social science concepts, while the second combines process with the nature and resolution of contemporary (yet nontransient) public issues and controversies. These two rationales confront squarely the value-laden aspects of social issues and decisionmaking.

Current trends in social science education

The period from 1961 to 1970 is best characterized as the era of "The New Social Studies." During this era, social studies courses, content, materials, and teaching methods were reexamined, and with the aid of Federal funds (U.S. Office of Education and National Science Foundation), new approaches to all four of these curricular areas were introduced. Concurrently, the experience of Vietnam exploded in social studies arenas, resulting in increased concern for social issues and personal and social values.

The decade of the sixties brought changes to social studies education, but these changes were largely undirected, chaotic, and capricious. As a result, today it is virtually impossible to identify any single consensus view of social studies at either the national level or for any single State. In the social studies today, a condition of near anarchy prevails; or, put another way, each local school district is "doing its own thing" in social studies.

Nevertheless, several trends set in motion during the sixties and early seventies can be currently observed, though it is difficult to determine their "staying power":

Elementary school social studies

- Less reliance on the "expanding human communities" approach (i.e., nuclear family, neighborhood, community, State, etc.).
- Less concern for mastery of facts, coupled with increased concern for concepts/generalization, inquiry, and activity-based lessons and units.
- Some movement toward "process" learning (either the problem-solving process or scientific method process).
- Expansion of the social science disciplines from which content is drawn: Anthropology, economics, geography, history, political science, psychology, social psychology, sociology.
- Availability of at least two controversial behavioral science-based social studies programs: Social Science Laboratory Kits (Lippitt and Fox, Science Research Associates) and Man: A Course of Study (Education Development Center, Curriculum Development Associates).
- A "minority" movement to accent values and moral development.
- A plethora of materials and media, though there is still a reliance on the textbook "series" (K-6 or 1-6, with a single sequence from each publisher).
- Some integration of social studies and other subject areas such as reading or science.
- A current battle to preserve social studies (also science) as a viable curricular area in the wake of "overboard" concerns for reading and mathematical skills.
- Increased attention to out-of-school, community-based activities, an expansion of the concept of field trips.
- Increased concern for skills: Reading, charting, graphing, map-reading, etc.
- A "minority" movement to combat racism and sexism in materials, methods, and attitudes.
- Increased use of role-playing, dramatization, simulations, and simulation games (even "Transactional Analysis for Tots").
- Some attempts to integrate the 15 career clusters of USOE into social studies curriculum.
- Slight attention to sociopolitical issues.

Secondary school social studies

- A proliferation of new and diverse courses, some in the previously "neglected" social science disciplines (e.g., anthropology, psychology, sociology, social psychology), some focused on topics (e.g., future studies, global studies, values clarification), and some based on contemporary social issues (e.g., "Analysis of Public Issues" program, law-related education, overpopulation, environmental issues, war and peace, sexism, racism).
- Variations in the time allotted to courses: Year-long, semester, and minicourses (4-9 weeks).
- Deemphasis of the discipline of history.
- A "minority" movement by some teachers who prefer "inquiry" or "discovery" methods of teaching and learning.

- Another "minority" movement to humanize the classroom and to deal more with student concerns and affective topics (values, values clarification, feelings).
- An abundance of curricular materials and media: Books, pamphlets, paperback series, slides/tapes, filmstrips, filmstrip/tape, films, overhead projector transparencies, photo collections, posters, maps, globes, and artifacts.
- The virtual abandonment of any *necessary* scope and sequence to the social studies curriculum.
- Deemphasis of required courses, with more required-with-options approaches and more purely elective courses (especially in the 12th grade).
- Some increase in community-based courses such as community studies, political internships, career education explorations, and social studies practicums.
- A "trace" of activist activities designed to provide students with experience in sociopolitical action and to increase the political efficacy of youth.
- An increasing fascination with and use of simulation games and simulations (over 200 of these are available from publishers and perhaps another 1,000 have been developed by teachers for local use).
- Newly published curriculum "packages" with heavy emphasis on "inquiry" teaching and learning, for the traditional social studies subjects of history, geography, and political science (i.e., government and civics): Amherst History Project, High School Geography Project, American Political Behavior, Comparing Political Experiences.

Current research thrusts in social studies education

It is difficult to delineate those research arenas which are peculiar to social studies education. Further, there is little cumulative research in this curricular field, with the exception of a sustained concern for reflective or critical thinking research over the past 50 years.

The following topics or questions probably account for about three-fourths of the current research in social studies education:

- Survey of extent of use of "new social studies" materials and methods.
- Survey of the changing patterns of course sequences and electives, and the substantive content of particular courses.
- Various types of research (survey, historical, experimental) on the goals and objectives of the social studies.
- Socialization research: Political, economic, geographical.
- Local and State evaluation and assessment research (also national assessment by the National Assessment of Educational Progress project of the Education Commission of the States).
- Research on "developmental stages" (the cognitive model of Piaget and the moral development theory of Lawrence Kohlberg).
- Theoretical and experimental research on the reflective or critical thinking process.

Note: This *Catalog* makes a distinction between Social Science and Social Education. Social Education products deal with applications of theories or principles derived from the social sciences; Social Education products stress the interconnectedness of various aspects of a student's social environment. NIE-supported research and development in the areas of values or moral education can be found in the Social Education section of this *Catalog*.

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RD 180 001

ENVIRONMENTAL EDUCATION CONCEPT LESSON CARDS

An instructional program for students in K-6 organized around conservation education, natural environment, and outdoor recreation

The Union 58 *Environmental Education Instructional Program* (K-6) is organized around conservation education, natural environment, outdoor recreation, and social environment concepts:

1. A family is a social environment (grades K-1).
2. Different cultures have different social environments (grades 2-3).
3. Living things respond to their (social) environments (grades 2-3).
4. Living things respond to their (natural) environments (grades 3-4).
5. Earth's resources are generally finite (grades 3-4).
6. People need to work constantly to conserve natural resources (grades 3-4).
7. Individual plants and animals can be identified by the various characteristics of their species (grades 4-6).
8. Man's environments and the natural environment are often in direct competition for natural resources (grades 4-6).
9. Natural resources may be enjoyed (grades 4-6).
10. Concern for the natural environment should be coupled with its recreational use (grades 4-6).

The K-6 concept program constitutes the basis of the Union 58 environmental education/outdoor education program which encompasses field trips, classroom visitations, and weekend day trips, as well as overnight camping trips.

SUBJECT AREA(S)

The subject area is environmental education.

INTENDED USERS AND BENEFICIARIES

This program is immediately applicable to those students who attend Union 58 schools in Groveton, Stark, and Stratford, New Hampshire.

The component coordinator works closely with Union 58 students and teachers in the development of Environmental Education (EE) lessons both in the classroom and outdoors.

The Union 58 Experimental Schools Program (ESP) EE lesson program incorporates both the immediate natural and social environments—and phenomena located within—into the instructional process.

Teachers use a variety of approaches regarding EE introduction into the classroom. Some infuse the EE lessons into different subject matter areas (e.g., social studies, science, mathematics); others treat EE as a separate subject and therefore reserve a period of time for specific lessons; and others concentrate on field trips and other outdoor activities.

The lessons are student oriented and directly involve students in the awareness/learning process.

GOAL(S) OR PURPOSE(S)

The purposes of this program are: (1) To develop student awareness of the natural and social characteristics of the immediate and more remote areas/regions, (2) to expose students to the natural and social resources of the area, and (3) to develop student understanding of the interrelationships between man and nature.

PATTERNS OF USE

The 10 concepts outlined in the beginning of this report are arranged in grade grouping sequences (i.e., K-1, 2-3, 3-4, and 4-6). Using this approach, teachers can rearrange the order of presentation within a grade sequence without seriously affecting the structure of the total K-6 program.

The process of developing an environmental education concept lesson product in grades 7-12 has begun. The Union 58 project does not expect lessons to be developed and in printed form until May or June 1975. Lessons in grades 7-12 will be organized around lessons and activities which extend the K-6 program and are infused into specific subject matter areas.

The lessons can be used at three different stages of instructional development (K-6):

(1) Introductory phase—Introduces a lesson or unit in a particular subject matter area.

(2) Integration—The EE lesson is infused into the subject matter content and becomes part of the course of study and activities.

(3) Culminating phase—The lesson can be used as a culminating activity.

ASSESSMENT PROVISIONS

Since January 1975, teachers have been involved in implementing EE into their classrooms.

Lesson and materials evaluation forms have been developed by level I, but the feedback, to date, is minimal; and no conclusions can be drawn.

TIME REQUIREMENTS

Each lesson card contains a statement of the time it will take to develop the instructional activity. The time required to develop a lesson varies with each lesson.

IMPLEMENTATION PROCEDURES

The average classroom teacher can develop and implement lessons. Unless lessons deal with highly technical subject matter (e.g., biology or geology), there is no need for extensive training. The lessons can be infused into several subject matter areas.

There is no set pattern of lesson development—only suggested approaches. Using this approach, the EE lessons can be implemented in the classroom or outdoors in ways which best suit the abilities, experiences, and training of teachers.

The infusion of environmental education into the existing curriculums does not require extensive organizational or scheduling changes. Lessons can be developed in the classroom and/or outdoors.

MATERIALS AND EQUIPMENT

Each EE lesson suggests several different types of materials and instructional activities that can be used. Several different types of materials (filmstrips, books, magazines, poster sets, activity kits, and microscopes) have been purchased.

ASSURANCES AND CLAIMS

Assurances

The K-6 concept lessons have been developed for the purpose of exposing students to both natural and social environments and for developing awareness of the interrelationships between man and nature.

The Union 58 ESP *Environmental Education Concept Lesson Cards* has been produced by the project staff with all students (K-6) in mind. There has not been any intention to develop a sexist program. Both boys and girls are involved in lesson activities.

As developed, the concept lessons could be replicated or transported to other sites and infused into the classroom curriculum.

Claims

There are not sufficient data available at this time to enable the Union 58 ESP project to make any claims of effectiveness, social fairness, or product development regarding the concept lessons produced.

DEVELOPER/AUTHOR:

New Hampshire School Supervisory Union 58
Experimental Schools Program
Groveton, N.H. 03582

Richard Peters, Project Director
Ellen Sommers, Coordinator

AVAILABILITY

The original intention of the Union 58 ESP project was to develop an outdoor education (weekend camping) program for students in grades 7-12. During the project's initial year, the decision was made to develop a K-12 environmental education program of awareness and exposure for students in Groveton, Stark, and Stratford, New Hampshire. This is still the project's prime mission. Only within the past few months has the project developed a product tailored to local abilities and needs. At this time, the Union 58 project has no plans to publish.

The development of EE concept lessons for K-6 students and grades 7-12 students is an ongoing process which involves development, implementation, evaluation, and revision.

The product has not been copyrighted. Samples of the lessons developed, to date, are available from the New Hampshire School Supervisory Union 58 Experimental Schools Program project:

Experimental Schools Program
Groveton Elementary School
Groveton, N.H. 03582

INFORMATION CURRENT AS OF MARCH 1975 ■

DISCUSSING CONTROVERSIAL ISSUES

A high school program to develop teachers' and students' skills in discussing controversial issues effectively in the classroom

Discussing Controversial Issues (DCI) is a program for high school teachers and students. The overall course objective is to develop teachers' and students' skills in discussing controversial issues effectively in the classroom. The course materials identify 14 moderator techniques that teachers practice and 14 participant techniques that students practice.

The course defines a "controversial issue" as any issue on which there is legitimate disagreement and which students and teachers feel is worth discussing. Within the scope of the course objectives, the content of the issue is not as important as how people talk about it. What is essential is that the discussion facilitates reflective, open inquiry.

Because value conflicts are inherent in American society, educators contend that the ability to communicate about differences of opinion is useful as a tool to help students inform themselves on socially important issues and to understand alternative viewpoints.

SUBJECT AREA(S)

The course may be used most easily in classes where the curriculum raises social, personal, and moral issues.

INTENDED USERS AND BENEFICIARIES

Course materials are particularly relevant for social studies or English teachers. It is possible to involve teachers from other disciplines when an aspect of their curriculums is adaptable to discussion of controversial issues (such as questions of business ethics in business education and the role of women in a homemaking class).

Course materials for students were developed at the high school level, primarily for grades 10, 11, and 12. The materials can be used with most 9th-grade classes and can be adapted for junior high school students, but the materials and suggested activities are less appropriate and more difficult at these grade levels.

GOAL(S) OR PURPOSE(S)

The goal of this course is to develop skills for discussing controversial issues effectively. Briefly, the steps to achieve this goal are: (1) To have an open discussion in which people feel free to say what they think, (2) to listen to others and keep the discussion focused, (3) to analyze different points of view, and (4) to evaluate the effectiveness of the discussion.

PATTERNS OF USE

The program is designed to be used by teachers and students in grades 9-12. The course can be incorporated into existing curriculums or offered as a short elective course in discussion skills. The skills presented in the lessons are cumulative, and lessons should be presented in the order of appearance.

ASSESSMENT PROVISIONS

Teachers volunteer for training in *Discussing Controversial Issues*. They choose which of their classes or students will participate. The course is self-instructional and self-evaluative. Direct supervision is neither required nor suggested. The teacher's handbook contains planning forms, self-evaluation forms, and self-check forms.

TIME REQUIREMENTS

Depending on the students' level of skill and the teacher's own priorities, the course can last 3-8 weeks (4 or 5 weeks is average).

IMPLEMENTATION PROCEDURES

The course is most manageable with 4 to 8 teachers, with 10 teachers being the maximum for a single school at any one time. If more teachers want to participate, recycling of the course is advised. A room should be set aside for course materials and audiovisual equipment. Schedules for sharing films and equipment should be established.

Summary Cost Information

The prices are estimates based on the average cost of similar materials produced by the developer. Initial cost to the user includes the purchase of the instructional films. The coordinator and student handbooks may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially, the school or district should provide a blank video tape or audiotape to be used by each teacher for evaluation of discussion sessions. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape or audiotape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Questionnaire responses by teachers who participated in the main field test revealed that 80 percent felt the product was better than other inservice education experiences. Ninety-two percent felt it should be included in the high school curriculum.

While producing the course materials, the developers were concerned that the materials would not be accepted in some communities because the discussion of controversial issues in the classroom is itself controversial. However, of approximately five localities in which the materials have been field tested, only one reported that the course was "too hot to handle."

The program is designed to train teachers to assume a nonjudgmental role as a facilitator or moderator and not to use discussions to indoctrinate students or to impose their value judgments on students. Students learn to assume the role of active participants to gain insights into their own and other people's opinions.

As a result of field observations and the subsequent data analysis, it became apparent that most of the 17 classes in 2 of the urban schools reacted to DCI in a markedly different way from the rest of the sample. These two inner-city schools, which included compensatory and opportunity classes, exhibited considerably lower entry levels and less improvement on several variables than did the other experimental classes. Interviews with the teachers in these schools revealed that, for many of the students, DCI was an intrusion into their previous arrangements regarding their curriculums; they now resented having to take part in the course every day for more than 4 weeks.

Because of these circumstances, it was decided to analyze the two inner-city schools separately from the rest of the sample. The relative lack of success in these schools limited the scope of generalizability regarding the course's effectiveness.

Teachers from the suburban schools were successful in learning 11 of 13 moderator skills. Some of the variables evinced low frequencies, but it is not known how often techniques should be used. Teachers from the inner-city schools improved in only four variables.

Student participants from the suburban classrooms improved for all course behaviors except one. Their most significant gains were in student-to-student interaction, acknowledgment of a previous speaker, asking for evidence, and reviewing the main points of the discussion. The students in the inner-city schools made fewer and smaller gains.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,200.00	Reusable	
Teacher's handbook	1 per teacher	4.00	Not reusable	
Student's handbook	1 per student	2.00	Reusable	
Coordinator's handbook	1	4.00	Reusable	
30-minute blank video tape (or audiotape)	1 per teacher	22.00	Annually	Any commercial distributor

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Meredith D. Gall, Author
Rita Weathersby, Author
Rachel Ann Elder, Author
Morris K. Lai, Author

AVAILABILITY

The developer has a tentative agreement for publication. Inquiries regarding date of availability should be addressed to the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

LANGUAGE OF PERSONAL EXPERIENCE (LOPE)

An instructional package to help children from ages 10 to 12 learn how to analyze significant elements of personal experience

The *Language of Personal Experience* (LOPE) is a supplemental language arts/social studies instructional package for children ages 10 to 12. LOPE is designed to give children a vocabulary which will help them to describe their personal reality in a consistent way. The intent is to help children learn to analyze those elements of personal experience which lead them to behave in certain ways in specific situations. They come to understand the perceptions, feelings, opinions, and conclusions that both produce and result from human behavior. The package makes no pronouncements about the relative merits of perceptions, specific feelings, opinions, or behaviors. Rather, it portrays at every opportunity the full range of options and remains as neutral and nonjudgmental as possible.

As a result of the last field test, LOPE is being revised from 25 sequenced lessons to 19 sequenced lessons, each running 30 minutes or less. It is group-paced but gives ample opportunity for individualized help when necessary. The instructional material is complete on the audiotape. The children in the classroon listen to the continuing story of a group of children at a summer camp. As part of the discussion of incidents in the story, various emotions are explored in the taped stories—loneliness, shyness, fear, anger, excitement, pleasure. The advantages and disadvantages of sharing feelings with others is also investigated: When is it easy and when is it difficult? When is it necessary? When is there a choice? At intervals during the story there are learning breaks, during which the children in the classroom are directed on the tape to complete dittoed discrimination exercises on the lesson's concepts. Feedback on the correct completion of these exercises is also given on the tape. At the conclusion of each lesson, a classroom activity is also introduced by the tape, to be led by the teacher. Classroom activities are designed to reinforce the concepts taught by LOPE and to provide the teacher with an active role. The instructional role of the teacher is largely a supportive one—in preparing the classroom, in observing students' abilities to acquire program concepts, and in supplementing each lesson with exercises suggested in the teacher's manual.

SUBJECT AREA(S)

Intrapersonal skills training—the overall purpose of LOPE is to provide children with a means by which they can understand better their personal experiences, as well as to share these experiences with others, to the extent that they wish to do so.

Key concepts emphasized in the program include the following: To account for a person's behavior, one must first look at the specific situation that person is in; feelings or emotions are always precipitated by some perception; all experience is personal, because both the perception and the emotion of an experience belong to the person having the experience, and the same situation can be experienced differently by different people.

INTENDED USERS AND BENEFICIARIES

LOPE has been designed for children of all abilities aged 10 to 12. Research shows that it is during these years that children's primary identification changes focus from parents to peer relationships.

GOAL(S) OR PURPOSE(S)

Children completing LOPE will be able: (1) To develop a consistent vocabulary for describing personal experience and for describing personal experience vs. expressing opinions, (2) to understand different reasons for a feeling or a behavior and to select the most likely explanation for it, and (3) to recognize when there is insignificant or incomplete data to reach a conclusion. With an understanding of what makes up human experiences and why people act differently in the same, similar, or different situations, the learners will be able to operate more effectively in their environment.

PATTERNS OF USE

The package is organized into 19 sequenced lessons. LOPE may be used independently or as a supplement for the regular language arts/social studies program.

ASSESSMENT PROVISIONS

Feedback to students is provided in two ways: Directly from the tape and from the teacher while observing the student using the materials.

TIME REQUIREMENTS

The program is intended to be used approximately 3 times a week in 40- to 50-minute sessions, with completion of the package in 6 to 7 weeks. However, the program can be used approximately 40 to 50 minutes each week (1 lesson per week), with completion in 19 or 20 weeks.

IMPLEMENTATION PROCEDURES

No special resources or classroom arrangement are required for the implementation of LOPE. Teacher training is included in the package through a taped training session. The teacher's manual which accompanies the program is an important source of suggestions for incorporating LOPE concepts into other subject areas. The developers suggest that parents observe the program in use and become familiar with the vocabulary used in LOPE, so that they will understand the value of the program.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

When used as directed, LOPE will not affect users negatively. This assurance is based on observations of the program being tested on approximately 1,200 students in the fall of 1974, as well as examination of this material by two psychologists in January and March 1974.

Assurances of Social Fairness

LOPE does not perpetuate social biases. Materials were examined by the Rights for Human Subjects Committee in 1973 and 1974, and it was found that children's roles were, for the most part, equitable.

Assurances of Replicability or Transportability

In the fall of 1974, LOPE was field tested in 13 6th-grade classes without developer assistance of any kind. However, the revisions currently being made in the package will be tested in the fall of 1975. Careful product development and revisions have been based on learner/user feedback, as well as expert judges' opinions. Assurances of the replicability of the revised product cannot be made at this time.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Classroom set, including posters, audiotapes, ditto masters for lesson exercises, teacher's manual, teacher training tape, and a volume of scripts	1 set per school or per 35 students	Not determined	Reusable	

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Joel Levin, Coproject Director
Tommy Casey, Coproject Director

AVAILABILITY

The projected availability date of LOPE is December 1975. For further information contact:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975

PASS IT ON, I

A multimedia product to increase opportunities for children ages 5-7 to grow in self-confidence

Pass It On, I, is one of two process-oriented instructional products developed as a set by the Children's Folklore Program. The product is designed for 5-, 6-, and 7-year-old children and their teachers. It uses traditionalized play—children's folklore—to increase opportunities for children to grow in self-confidence; in appreciation of group similarities and differences; in creativeness; and in the development of skills of communication, group organization and management, problem solving, and decisionmaking.

Pass It On, I, is made up of a sequence of five *Pass It On* activities and a staff instructional package. Each activity presents folklore items or forms that children can learn and perform together, and stimulates the sharing and learning of folklore from the children's own repertoires. Instructional materials for children include five 3- to 5-minute, 16mm color films which introduce folklore items, riddle books for practice in riddling, and cartoon books which provide motivation and reinforcement for learning and sharing folklore. Staff instructional materials include a guide for the orientation of teachers, a film and audiotape to sensitize teachers to children's folklore, and a handbook of guidelines and lesson plans for the presentation of *Pass It On, I.*

The design of *Pass It On, I,* draws from research which is based on findings of psychologists, anthropologists, and linguists, and which is related to the effects of play on child development. Studies indicate that adults' thinking processes, as well as their self-confidence and social skills, are rooted, to a large degree, in the play of their childhood.

Research evidence shows that play is a nonthreatening environment where children readily employ and experiment with systems of rules and with skills they see adults apply. *Pass It On, I,* further draws from the value of traditionalized play, which is children's folklore, as a vehicle of cultural expression and child-to-child communication. The ultimate content of *Pass It On, I,* is the children's own folklore repertoires, their own interaction, and their own responses. Because of this, children are actively involved in learning and creating learning situations.

Three strategies are used in *Pass It On, I:* (1) Team teaching, the combination of classes from different grade levels, provides opportunities for new play groups and therefore increases opportunities for interaction across age, sex, and ethnic groups; (2) small groups are used since they are manageable and increase opportunities for participation by individual children; and (3) the use of 9-, 10-, and 11-year-old children as group helpers provides leadership for the older children, while reducing supervisory requirements on teachers and expanding the younger children's opportunities to learn.

Teachers using *Pass It On, I,* must orient the older group helpers, arrange schedules, plan grouping procedures, introduce activities, and operate projection equipment. However, *Pass It On, I,* teachers function primarily in a resource role. They may offer specific information to the children, or they may facilitate smoother interaction in the small groups through brief participation, questions, or suggestions. Additional time created through team teaching and the use of group helpers can be applied to teacher observation of group activities. This observation can increase the effectiveness of the teacher as a resource.

SUBJECT AREA(S)

Pass It On, I, is a process-oriented product, and several concepts are considered in the process orientation. Children's folklore takes the forms of games, rhymes, riddles, songs, stories, and dances, which are known and performed by children. The aspect of performance, a communicative process among children, is inseparable from the definition. It is performance that traditionalizes the form and that makes the form a vehicle for cultural expression. As a communicative process, folklore requires creativeness and conveys the culture of the performer and the performer's group. More is involved in the learning and performance of folklore. Skills are required even to use the form. These include problem solving, decisionmaking, group organization and management, and communication skills. In acquiring an item of folklore and the skills it requires, a child must follow, informally in a social interaction context, a process of learning that approximates the process for learning in the cognitive realm. Thus, *Pass It On, I,* emphasizes a wide range of concepts: Concepts from cultural anthropology; concepts from the folklore of children; concepts from sociolinguistics; concepts from developmental psychology; concepts of aesthetic expression, artistry, creativity, and cultural expression; concepts from each child's cultural folklore repertoire and each child's skills; and concepts from teacher understanding of the sensitization to children's folklore.

INTENDED USERS AND BENEFICIARIES.

Pass It On, I, is designed for use by 5-, 6-, and 7-year-old children and their teachers. Testing and school personnel responses indicate benefits were achieved for the target group. In addition, testing found that 9-, 10-, and 11-year-old children who served as group helpers during *Pass It On, I,* also identified aspects of the product as useful in increasing positive communication between parents and children and between community and school.

GOAL(S) OR PURPOSE(S)

This product has the following goals: (1) To increase the target children's interaction across age, sex, and ethnic groups, and thereby enhance verbal and nonverbal communication skills, increase group organization and management skills, and strengthen problem-solving and decisionmaking skills, (2) to increase sharing of folklore among target children from differing age, sex, and ethnic groups, and thereby enhance self-confidence of individual children, increase awareness of group similarities and differences, improve the individual child's adeptness in cultural expression, and broaden the individual child's experience in creativeness; and (3) to orient teachers in use of *Pass It On, I,* and thereby sensitize teachers to the nature of children's folklore and to its role in their children's development, increase teacher effectiveness in the resource role, and familiarize teachers with materials, strategies, and presentation of *Pass It On, I.*

PATTERNS OF USE

Pass It On, I, is a self-contained product made up of five *Pass It On* activities which are presented to children sequentially. An optional activity can be used in conjunction with the activities or alone in a sixth presentation. The staff instructional package involves approximately 4 hours of orientation prior to implementation of *Pass It On, I.*

TIME REQUIREMENTS

Each of the five *Pass It On, I,* activities includes folklore activity time (30 minutes) and folklore trading time (15 minutes). One activity is presented each week for 5 weeks anytime during the school year. The optional activity, if used, can be broken down into several 5- to 15-minute additions to regular activities, or it can be presented as an individual 45-minute activity during the sixth week.

Orientation for teachers, contained in a self-instructional package, takes place prior to implementation of *Pass It On, I,* and involves self-instruction (3 hours), group helper media viewing session (30 minutes), and group helper orientation session (30 minutes).

IMPLEMENTATION PROCEDURES

The product can be used in both team-taught and traditional, self-contained classrooms. It can be implemented with or without older children as group helpers. However, team teaching and the use of older group helpers are recommended strategies. In some cases, schools wishing to use these strategies will have to make special provisions.

ASSURANCES AND CLAIMS

This product has been pilot tested in 8 classrooms with 150 5-, 6-, and 7-year-old children. It is scheduled to be field tested in late spring 1975.

At the end of the 6-week pilot test period, the teachers reported that their pupils' interest and participation were positive during the instructional periods. Attitudes of participating teachers and school administrators toward the program were positive also.

Parents of pupils involved in the pilot test were informed in writing of their children's involvement. All teachers reported favorable reactions and interest from parents.

Teachers completed a checklist each week of the program. Results from the checklist and from the post-pilot test interview are summarized below. The teachers in the program reported the teacher handbook as extremely useful, with few reports of problems in understanding or usefulness. No problems were reported with implementation of the product that might have occurred during the pilot test period if the product staff had not made regular site visits. No problems were reported with product implementation that could not have been handled without the help of the Southwest Educational Development Laboratory staff. Ease of use of multimedia materials was also reported. The teachers reported no problems with equipment. Thus, the products are reported by users to be transportable.

Teamed classrooms utilizing older 4th- and 5th-grade helpers or self-contained classrooms utilizing no helpers were designated at each pilot test site. No differences were found in pupil interest, pupil participation, or pupil mastery of activities due to either treatment.

At the end of the pilot test, a majority of teachers reported a preference for implementing the program in a teamed situation. Using older group helpers reportedly benefited the teachers who used them, the teachers' children, and the teachers' helpers as well. The teachers reported an advantage in being able to act as observers during the folklore period. The observer role enabled them to learn more about their children, whom they were able to see from a different point of view.

Stimulus materials (six media presentations, the "Riddle Book," and "Comic Book") were reviewed by a panel of specialists external to the program. The panelists found no biases toward socioeconomic or ethnic groups present. No bias regarding sex stereotyping was mentioned although the subject was not addressed specifically. In addition, the panelists found the stimulus materials to be appropriate to the developmental level for which each was designed, and relevant to the promotion of effective development. The panelists found the stimulus materials not to be detrimental to the refinement of social communication skills nor to the understanding of cultural diversity, and they found them to encourage social interaction. They found the stimulus products appropriate for use by students who do not read well or at all.

A process-oriented product in which mastery is measured by evidence of the process can only be measured by observation. Although no claims can be made before field test data are gathered, findings from observations made by teachers, program staff, and evaluation staff during pilot test are summarized below.

Voluntary participation across sex, age, and ethnic groups did not increase during the period of pilot test for a majority of pupils as observed by both program and evaluation staff. This may be due to the tendency of children at this age to form one-to-one relationships rather than to work in groups.

The teachers reported observing changes in their socially and academically shy children ("loners") as well as in their social leaders which they attributed to the program. No changes attributable to the program were reported among academic leaders. All changes reported were toward increased participation.

Emphasis during the field test will center more on progression through the stages of folklore and observation of emerging leadership roles than on social interaction patterns, as was emphasized during the pilot test.

MATERIALS AND EQUIPMENT

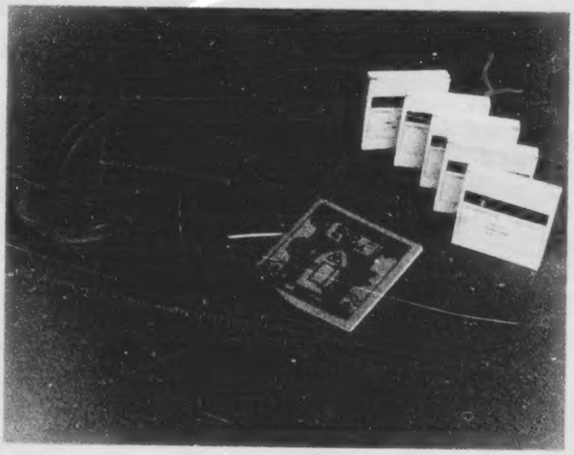
Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Unit set (2 classrooms)	1 set per unit	165.00	Reusable	
Staff instructional package	1 set per school or district	80.00	Reusable	

Note: Both color 16mm films and color video tape cassettes will be available for the presentation of activity instructional films. A video tape cassette playback unit is required for the use of the latter.

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Carol Sutherland Hatfield, Program Coordinator



AVAILABILITY

Pass It On, I, undergoes field test, the final phase of Southwest Educational Development Laboratory developmental testing, during spring 1975. The product currently is under a developmental copyright.

Pass It On, I, will be ready for dissemination in fiscal year 1975.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 005

PASS IT ON, II (PART OF THE CHILDREN'S FOLKLORE PROGRAM)

A multimedia product to increase opportunities for children ages 6-8 to grow in self-confidence

Pass It On, II, is one of two process-oriented instructional products developed as a set by the Children's Folklore Program. The product is designed for 6- and 8-year-old children and their teachers. It uses traditionalized play—children's folklore—to increase opportunities for children to grow in self-confidence; in appreciation of group similarities and differences; in creativeness; and in the development of skills of communication, group organization and management, problem solving, and decisionmaking.

Pass It On, II, is made up of a sequence of five *Pass It On* activities and a staff instructional package. Each activity presents folklore items or forms that children can learn and perform together, and stimulates the sharing and learning of folklore from the children's own repertoires. Instructional materials for children include five 3- to 5-minute, 16mm color films which introduce folklore items, riddle books which are resources for practice in riddling, and cartoon books which provide motivation and reinforcement for learning and sharing folklore. Staff instructional materials include a guide for the orientation of teachers, a film and audiotape to sensitize teachers to children's folklore, and a handbook of guidelines and lesson plans for the presentation of *Pass It On*.

The design of *Pass It On, II*, draws from research which is based on findings of psychologists, anthropologists, and linguists and which is related to the effects of play on child development. Their studies indicate that adults' thinking processes, as well as their self-confidence and social skills, are rooted, to a large degree, in the play of their childhood. Research evidence shows that play is a nonthreatening environment where children readily employ and experiment with systems of rules and with skills they see adults apply. *Pass It On, II*, further draws from the value of traditionalized play, which is children's folklore, as a vehicle of cultural expression and child-to-child communication. The ultimate content of *Pass It On, II*, is the children's own folklore repertoires, their own interaction, and their own responses. Because of this, children are actively involved in learning and creating learning situations.

Three strategies are used in *Pass It On, II*: (1) Team teaching, the combination of classes from different grade levels, provides opportunities for new play groups and therefore increases opportunities for interaction across age, sex, and ethnic groups; (2) small groups are used since they are manageable and increase opportunities for participation by individual children; and (3) the use of 9-, 10-, and 11-year-old children as group helpers provides experience in leadership for the older children, while reducing supervisory requirements on teachers and expanding the younger children's opportunities to learn.

Teachers using *Pass It On, II*, must instruct themselves and the older group helpers, arrange schedules, plan grouping procedures, introduce activities, and operate projection equipment. However, *Pass It On, II*, teachers function primarily in a resource role. They may offer specific information to the children, or they may facilitate smoother interaction in the small groups through brief participation, questions, or suggestions. Additional time created through team teaching and the use of group helpers can be applied to teacher observation of group activities. This observation can increase the effectiveness of the teacher as a resource.

SUBJECT AREA(S)

Pass It On, II, is a process-oriented product, and several concepts are considered in the process orientation. Children's folklore takes the forms of games, rhymes, riddles, songs, stories, and dances which are known and performed by children. The aspect of performance, a communicative process among children, is inseparable from the definition. It is performance that traditionalizes the form, that makes the form a vehicle for cultural expression. As a communicative process, folklore requires creativeness and conveys the culture of the performer and the performer's group. More is involved in the learning and performance of folklore. Skills are required even to use the form. These include problem solving, decisionmaking, group organization and management, and communication skills. In acquiring an item of folklore and the skills it requires, a child must follow, informally in a social interaction context, a process of learning that approximates the process for learning in the cognitive realm. Thus, *Pass It On, II,* emphasizes a wide range of concepts: Concepts from cultural anthropology; concepts from the folklore of children; concepts from sociolinguistics; concepts from developmental psychology; concepts of aesthetic expression, artistry, creativity, and cultural expression; each child's cultural folklore repertoire and each child's skills form the basis of content, thereby bringing into the classroom the culture and skills of each group in the community; and teacher understanding of and sensitization to children's folklore.

INTENDED USERS AND BENEFICIARIES

Pass It On, II, is designed for use by 6-, 7- and 8-year-old children and their teachers. Testing and school personnel response indicate benefits were achieved for the target group. In addition, testing found that 9-, 10- and 11-year-old children who serve as group helpers during *Pass It On* also benefit from the experience. Teachers and principals involved in product testing received positive response to the folklore program from parents. Teachers and administrators also identified aspects of the program as useful in increasing positive communication between parents and children and between community and school.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To increase target children's interaction across age, sex, and ethnic groups, and thereby enhance verbal and nonverbal communication skills, increase group organization and management skills, and strengthen problem-solving and decisionmaking skills; (2) to increase sharing of folklore among target children from differing age, sex, and ethnic groups, and thereby enhance self-confidence of individual children, increase awareness of group similarities and differences, improve the individual child's adeptness in cultural expression, and broaden the individual child's experience in creativeness, and (3) orient teachers in the use of *Pass It On* and thereby sensitize teachers to the nature of children's folklore and to its role in children's development and to increase teacher effectiveness in the resource role.

PATTERNS OF USE

Pass It On, II, is a self-contained product in which the five *Pass It On* activities are presented to children sequentially. An optional activity can be used in conjunction with the activities or alone in a sixth presentation. The staff instructional package involves approximately 4 hours of orientation prior to implementation of *Pass It On, II.*

TIME REQUIREMENTS

Each of the five *Pass It On* activities includes folklore activity time (30 minutes) and folklore trading time (15 minutes). One activity is presented each week for 5 weeks anytime during the school year. The optional activity, if used, can be broken down into several 5- to 15-minute additions to regular activities, or it can be presented as an individual 45-minute presentation during a sixth week.

Orientation for teachers, contained in a self-instructional package, takes place prior to implementation of *Pass It On, II,* and involves self-instruction (3 hours), group helper media viewing session (30 minutes), and a group helper orientation session (30 minutes).

IMPLEMENTATION PROCEDURES

The product can be used in both team-taught and traditional, self-contained classrooms. It can be implemented with or without older children as group helpers. However, team teaching and the use of older group helpers are recommended strategies. In some cases, schools wishing to use these strategies will have to make special provisions.

ASSURANCES AND CLAIMS

This product has been pilot tested in 8 classrooms with 223 6-, 7-, and 8-year-old children. It is scheduled to be field tested in late spring 1975.

At the end of the 6-week pilot test period, the teachers reported that their pupils' interest and participation were positive during the instructional periods. Attitudes of participating teachers and school administrators toward the program were also positive.

Parents of pupils involved in the pilot test were informed in writing of their children's involvement. All teachers reported favorable reactions and interest from parents.

Teachers completed a checklist each week of the program. Results from the checklist and from the post-pilot test interview are summarized below. All of the teachers in the program reported the teacher handbook as extremely useful, with few reports of problems in understanding or usefulness. Few teachers reported problems with the management of the program. Over half reported no problems with implementation they couldn't deal with without the help of SEDL staff. Ease of use of multimedia materials was also reported. Over half of the teachers reported no problems with equipment. Thus, the products are reported by users to be transportable.

Teamed classrooms utilizing older 4th- and 5th-grade helpers or self-contained classrooms utilizing no helpers were designated at each pilot test site. No differences were found in pupil interest, pupil participation, or pupil mastery of activities due to either treatment.

At the end of the pilot test, a majority of teachers reported a preference for implementing the program in a teamed situation. Using older group helpers reportedly benefited the teachers who used them, the teachers' children, and the teachers' helpers as well. The teachers reported an advantage in being able to act as observers during the folklore period. The observer role enabled them to learn more about their children, whom they were able to see from a different point of view.

Stimulus materials (six media presentations, the "Riddle Book," and "Comic Book") were reviewed by a panel of specialists external to the program. The panelist found no biases toward socioeconomic or ethnic groups present. No bias regarding sex stereotyping was mentioned, although the subject was not addressed specifically. In addition, the panelists found the stimulus materials to be appropriate to the developmental level for which each was designed, and relevant to the promotion of effective development. The panelists found the stimulus materials not to be detrimental to the refinement of social communication skills nor to the understanding of cultural diversity, and they found them to encourage social interaction. They found the stimulus products appropriate for use by students who do not read well or at all.

A process-oriented product in which mastery is measured by evidence of the process can only be measured by observation. Although no claims can be made before field test data are gathered, findings from observations made by teachers, program staff, and evaluation staff during pilot test are summarized below.

Voluntary participation across sex, age, and ethnic groups increased during the period of pilot test for a majority of pupils as observed by both program and evaluation staff.

The teachers reported observing changes in their socially and academically shy children ("loners") as well as in their social leaders which they attributed to the program. No changes attributable to the program were reported among academic leaders. All changes reported were toward increased participation.

Emphasis during the field test will center more on progression through the stages of folklore and observation of emerging leadership roles than on social interaction patterns, as was emphasized during the pilot test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Unit set (2 classrooms) including 5 16mm color films (approx. 5 min. each), riddle books and cartoons relating to folklore activities, and note sheets for parents	1 set per unit (2 classrooms)	170.00	Reusable	
Staff instructional package including 1 16mm color film (14 min.), a teacher handbook, an orientation guide for teachers, and an audiotape cassette	1 set per school or district	80.00	Reusable	

Both color 16mm films and color video tape cassettes will be available for the presentation of activity instructional films. A video tape cassette playback unit is required for the use of the latter.

DEVELOPER/AUTHOR:

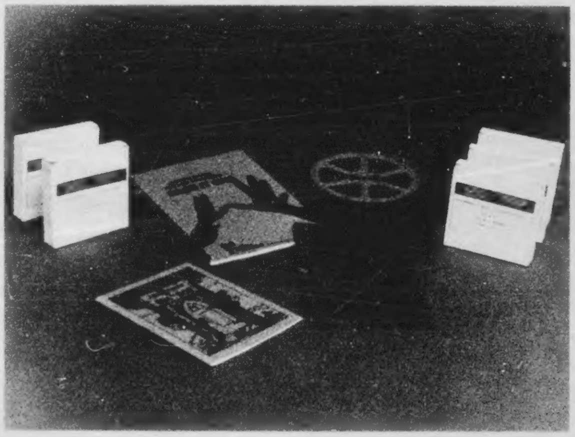
Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Director, Early Elementary Program
Carol Sutherland Hatfield, Coordinator, Children's Folklore Program

AVAILABILITY

Pass It On, II, undergoes field test, the final phase of SEDL developmental testing, during spring 1975. The product is currently under a developmental copyright.

Pass It On, II, will be ready for dissemination in fiscal year 1976.



INFORMATION CURRENT AS OF MARCH 1975 ■

FROM CHILD TO CHILD (PART OF THE CHILDREN'S FOLKLORE PROGRAM)

A motivational overview used to familiarize the viewer with the importance of play to the learning of young children

From Child to Child is a motivational overview and a staff instructional product. As a motivational overview, it is used to familiarize the viewer with the importance of play and informal activities to young children's learning. It also shows ways that Southwest Educational Development Laboratory's (SEDL's) Children's Folklore Program uses such activities. As a staff instructional product, the film is used in a teacher orientation package to sensitize teachers, visually and aurally, to the importance of folklore activities in child development.

From Child to Child, produced as a 16mm color film or as a video tape cassette, focuses on children's folklore activities, emphasizes the role which they perform in a child's development, and outlines goals and the development process of the Children's Folklore Program. The film delineates the use of children's folklore, which is traditionalized play, in instructional products to increase children's opportunities to grow in self-confidence and to enhance development of appreciation of group similarities and differences, communication skills, creativity, group organization and management, and problem-solving and decisionmaking skills.

The developers recognize the need for the understanding of play as an educational concept and, in particular, the role of traditionalized play (children's folklore) in the development of important skills in children. A growing body of research indicates that play provides a nonthreatening environment in which children can experiment with systems of rules and with skills they see applied among adults. Children's folklore is a communicative process which allows for creative and cultural expression. For this reason, children's folklore is well suited for use in an integrated school situation. Besides providing all children with the opportunity to increase their self-confidence through creative expression, it is an effective vehicle for promoting cross-cultural understanding.

SUBJECT AREA(S)

From Child to Child contains a description of children's folklore activities and the skills developed through these activities, as well as a commentary on Southwest Educational Development Laboratory capabilities in developing instructional products using the folklore of children. Children's folklore activities are indistinguishable from play to most people. These activities include games, rhymes, riddles, songs, stories, and dances which are known and performed by children. Through these activities, children develop abilities in communication, problem solving, decisionmaking, group organization and management, and social interaction. In the design and development of *From Child to Child*, the Southwest Educational Development Laboratory children's folklore component drew from a wide range of concepts: Concepts from cultural anthropology; concepts from the folklore of children; concepts from linguistics and sociolinguistics, concepts from developmental psychology; concepts of aesthetic expression, artistry, creativity, and cultural expression; teacher understanding of and sensitization to children's folklore; and viewer understanding of children's folklore and its use in instructional products.

INTENDED USERS AND BENEFICIARIES

As a motivational overview, *From Child to Child* is designed to be shown to lay personnel interested in children's folklore, including persons outside the field of education as well as educators and those in education-related fields. It also is used at professional meetings and conferences to diffuse information about Southwest Educational Development Laboratory and the Children's Folklore Program.

As a staff instructional product, *From Child to Child* is designed to be used by teachers as part of an orientation package. In this capacity, it is shown first to sensitize teachers to children's folklore and again after a self-check questionnaire to help teachers identify specific playground behaviors.

GOAL(S) OR PURPOSE(S)

From Child to Child seeks to illustrate the Children's Folklore Program goals: (1) To develop an awareness and appreciation of group similarities and differences, (2) to develop artistic/expressive competence, (3) to develop linguistic/communication skills, and (4) to develop problem-solving and decisionmaking abilities in human relations.

The film also seeks to convey a feeling for children's folklore to any lay audience not familiar with the importance of play in children's development and to sensitize teachers to children's folklore activities, as well as the developmental skills promoted through those activities.

PATTERNS OF USE

From Child to Child is a self-contained product which can be used in two ways: As a motivational overview and as a staff instructional product. As a staff instructional product, it is used in conjunction with an organizational manual, an audiotape, and a teacher's handbook.

TIME REQUIREMENTS

From Child to Child is a 14-minute film. When used as a staff instructional product as part of a teacher orientation package, it is shown twice, for a total of 28 minutes.

IMPLEMENTATION PROCEDURES

As a motivational overview, *From Child to Child* is used by lay personnel interested in the Children's Folklore Program or by Southwest Educational Development Laboratory staff to disseminate information about the program. As a staff instructional product, it is used either by a teacher or a group of teachers, or by a selected trainer with a group of teachers.

ASSURANCES AND CLAIMS

The overview film for the Children's Folklore Program was pilot tested in spring 1974. The film also was reviewed by a Southwest Educational Development Laboratory staff panel not involved in its design. Care was taken in choosing the panelists to insure multiethnic and sex balance and to provide experience from various backgrounds, including both theoretical and practitioner.

As a result of the panel review, revisions in the film include lessening emphasis on black American folklore, increasing emphasis on Chicano folklore, and using more males in the films. Other revision recommendations included emphasizing the process of folklore as much as the content of folklore and improving film quality and narration.

No sex or ethnic bias has been reported in the revised version. Care was taken in the revision to include a balance of sex, ethnic, and social roles in the film. The revised film will be field tested during spring 1975.

The film was reported by the panelists to reinforce informal learning techniques, to encourage social communication skills among children, to help children understand and accept group differences, to model processes for problem solving and decisionmaking in a social setting, and to emphasize children's learning from each other. Efforts were made in the revised version to retain these strengths as emphasized in the earlier version.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
From Child to Child (16mm film)	1 film per classroom	100.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Carol Sutherland Hatfield, Program Coordinator

AVAILABILITY

The product exists in prepublication form only; no copies are available for distribution at this time. For information, contact:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

INFORMATION CURRENT AS OF MARCH 1975 ■

RESPONSIVE EDUCATION PROGRAM

A program for grades K-3 meant to strengthen educational experiences by responding to the uniqueness of learners

The *Responsive Education Program* for primary grades (K-3) is based on the belief in building a pluralistic society through strengthening educational experiences to respond to the uniqueness of learners as individuals and group members. A basic tenet of the program recognizes and encourages parental and community involvement in the educational system. Three major goals provide direction for program operations. The program will assist the learner: To experience and develop behaviors for a cultural pluralistic environment, to develop a healthy self-concept, and to develop cognitive abilities. Each of these program goals is supported by a set of learner objectives.

In a culturally pluralistic environment, the learners: (1) Like themselves and their people; (2) have factual information about their cultural and ethnic group from the perspective of the group; (3) are aware of and respect facts about other cultural and ethnic groups' historical pasts and presents; (4) value human dignity and worth and apply these values to human rights and social justice; and (5) perceive options available to them and use them for problem solving to meet personal, community, and world needs.

Learners with healthy self-concepts: Use their own values, ideas, and feelings authentically and appropriately; identify and use resources in problem solving; use possibilities within limits; and self-evaluate and take credit for their accomplishments.

The educational climate or environment of a responsive classroom includes a physical setting that is functional and current, readily accessible, and relevant to and representative of the children. It also contains potential for variations in grouping size and composition, activity level, and means of expression.

The curriculum of a responsive classroom would: Emphasize the learning process as opposed to only learning facts; provide learning experiences that simulate the real world use of content skills and concepts; be designed around experiences that evolve from an activity base; and include teacher and learner materials which represent, or are able to be adapted to represent, the immediate environment and the people within it.

The teachers are integral and key contributors in a responsive learning environment. They are skilled observers of the learners, documenting activities and behaviors. They respond to the learners in a manner that supports and contributes to responsive objectives and principles. They establish an educational climate, develop a curriculum, and facilitate student experiences.

The students in a responsive learning environment engage in exploring, planning, choice making, and goal setting. They discover individual self-strengths, preferences, and liabilities. They develop a repertoire of abilities for building a broad and varied experiential base as well as self-consciousness. The students interact with all aspects of the educational environment, including other students. Individually, or within a group, they may take on the role of leader, follower, or evaluator. These interactions can be curriculum oriented and may also involve personal and social issues. As the students increase their experiential repertoire, develop self, and address the personal and social issues, they take responsibility for their actions.

SUBJECT AREA(S)

The *Responsive Education Program* permeates and encompasses the curriculum of the primary grades.

INTENDED USERS AND BENEFICIARIES

This program is designed for students in the primary grades (K-3). Upper elementary students are also utilizing the responsive process. Teachers and principals receive inservice training in the implementation of the program.

GOAL(S) OR PURPOSE(S)

The goals of this program are to help the learner: (1) To experience and develop behaviors for a cultural pluralistic environment, (2) to develop a healthy self-concept, and (3) to develop cognitive abilities. The development of competencies in adults to assist the learner reach these goals is the major purpose of the inservice training program.

PATTERNS OF USE

The program is a learning process that can be applied to all aspects of the primary level curriculum. It would be built into lesson plans for curriculum content and activities.

ASSESSMENT PROVISIONS

Learning is assessed by the teacher and school evaluators. Standardized tests may be used, as well as tests designed to measure specific program outcomes, such as language production, problem solving, and forms of educational experiences.

TIME REQUIREMENTS

This program is operational for the complete school year during the appropriate number of instructional hours per day.

IMPLEMENTATION PROCEDURES

The program requires preservice training prior to beginning the school year and ongoing inservice training during the school year for adults in the classrooms. Teachers are encouraged to implement one element of responsiveness at a time. Planning time is needed either at the beginning or at the end of each school day.

Classrooms may need to be organized to provide for learning centers, individual work areas, small-group activities, and large-group sessions. Materials will need to be available to students, accommodating different learning styles and pacing.

Parents are encouraged to particpate in the classrooms and become involved in the educational program.

Summary Cost Information

Cost for total program implementation as well as specific elements will be available in fall 1975. The prices given in "Materials and Equipment" are subject to change.

Personnel Required for Product Adoption and Implementation

A classroom teacher participating in inservice training can implement this program. Teaching assistants (paraprofessionals) or parent volunteers receiving training would accelerate implementation. Administrators directly responsible for classroom instruction should also be involved. If 10 classrooms are established, a local staff developer/trainer should implement the training. Inservice training for staff developers/teachers/administrators is available from the Far West Laboratory.

ASSURANCES AND CLAIMS

Assurances

The information gathered during the development of this program in 14 school systems in 13 States over a period of 5 years indicates that the students continue to progress and meet district standards. The developer has not received any reports of harm associated with the use of the product. In fact, most systems have extended the program beyond the initial pilot classrooms.

Classroom curriculum materials are thoroughly tested and verified. Training materials have undergone rigorous development, and the training process has been developed and refined over a period of 5 years.

Claims

Classroom observation data collected by the two national contractors have clearly shown that the distinctive educational philosophy of the program has been successfully translated into a classroom setting. This distinct classroom process has been successfully replicated in a large number of classrooms, in school districts varying widely in geographical and social factors, across grade levels, and across years of program operation. In classrooms where this responsive process has been implemented, data show that children's self-concept development and problem-solving ability have increased.

Children's gains in "basic skills" have been another important goal of the program. A variety of evaluation studies conducted by participating school districts, by the Far West Laboratory, and by two national contractors, have documented program success in improving the competence of children in the areas of reading, quantitative skills, and language skills for grades kindergarten through 3d. In another study, children in the program were shown to have gained significantly more on intelligence measures than comparison children over a 3-year period.

A number of components and methods have proved their worth not only in the context of the total program, but also as independently applied tools for improving early childhood education. The Parent/Child Toy-Lending Library has been used as an independent resource both nationally and internationally. The Learning Booth has been evaluated extensively within the program and also has potential as an independent unit. Many school districts across the Nation have used the *Responsive Education Program* as a model and have borrowed extensively from its principles and methods. Some of these principles and methods have been packaged as units in the flexible learning system, a comprehensive program for teaching and certifying early childhood teaching personnel.

A distinctive feature of the program is its method of delivery and implementation. Emphasis is placed on maximum participation by all concerned participants within the community: Teachers, teacher trainers, administrators, and especially parents. In particular, the program has had considerable success in increasing the participation of parents in the education of their children, both directly as teacher resources in the classroom and as decisionmakers in policy matters.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Kindergarten:				
Typewriter and materials for the learning booth	1 per class	350.00		Smith Corona and developer
Curriculum content materials (toys and games); may be substituted for regular classroom materials	As normally provided	200.00		Publishers
Grades 1, 2 and 3:				
Curriculum content materials (SCIS, Language Experience in Reading)	As normally provided	200.00		
Teacher training materials in healthy self-concept, problem solving, language skills, literature, analyzing textbooks, learning centers, etc.	1 per staff developer and 1 per teacher	10.00 each		

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Denis Thoms, Program Director
Francione Lewis, Assistant Director
Nicholas Rayder, Director of Evaluation

AVAILABILITY

The *Responsive Education Program* is currently available from the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 008

SOCIAL ENCOUNTER AND RESEARCH CURRICULUM FOR HUMANIZATION (SEARCH)

An individualized, interdisciplinary program of social education for grades K-3

Social Encounter and Research Curriculum for Humanization (SEARCH) is a Piaget-based, individualized, interdisciplinary program of social education for grades K-3. SEARCH focuses on the interaction between children and their personal, social, and cultural environments. A total of 40 classroom units constitutes the K-3 package. Each unit is accompanied with multimedia instructional materials and preevaluation and postevaluation instruments. The materials are packaged for self-management and ready access by the students.

SEARCH content is organized around five psychosocial life functions: Self-realizing, governing, producing and consuming goods and services, utilizing environments, and interpreting and generating ideas and events. The functions reflect the fact that human action and awareness begin with a personal focus and expand, as cognitive development expands, toward a focus on all humanity. The functions also relate to the traditional social science disciplines from which SEARCH obtains the content of its instruction: Geography, history, economics, political science, sociology, anthropology, and psychology. SEARCH has a three-phase instructional plan related to Piaget's developmental sequence: Encounter, research, and action.

The encounter phase consists of activities that introduces a unit, and concentrates on the development of the child's image and language for material in that unit. The research phase emphasizes the active investigation and exploration of a particular problem related to that unit. The action phase activities require the child to demonstrate knowledge of the unit material by relating it to its own social reality and sharing the knowledge with classroom peers.

The teacher is primarily a facilitator of instruction; the teacher monitors critical checkpoints in testing and keeps records of the child's performance. The central focus, however, is on the child's own activity. Emphasis is on the learner's increasing responsibility to manage his/her own activity. Choice of various materials by the student is encouraged, placement is determined after pretest diagnosis, and mastery testing occurs upon the completion of a unit.

The sequence of activities is presented by means of a flow chart which applies to the materials in every SEARCH unit. The average time spent on a unit is 3-1/2-4 hours per child. The SEARCH's instructional program for grades K-3 is conveniently divided into 3 groups of 10 units; each group is roughly associated with a grade level of instruction. Every unit begins with a diagnostic pretest and concludes with a unit mastery test. The instructional plan allows for the child to pace learning as the various activities are pursued. The materials provide for independent, as well as partner and group, experiences.

SEARCH is in its third year of tryout in an urban center elementary school in Philadelphia, Pennsylvania. Preliminary findings indicate that the instructional strategies used in SEARCH are effective and that the materials are particularly appealing to students. A new addition to the SEARCH program is STEP (SEARCH teacher education program), which is currently being tested. STEP, a self-instructional program, includes a handbook and several multimedia presentations to acquaint teachers with the strategies and procedures of the SEARCH program. STEP also includes a START unit for teachers to prepare students to use the SEARCH instructional plan.

SUBJECT AREA(S)

Social education is the subject area.

Structurally the SEARCH functions are designed to organize more traditional social studies content into an integrated program. Larger themes such as personality, order, value, cosmos, and culture are links between the SEARCH functions and such disciplines as psychology, sociology, anthropology, political science, economics, geography, and history.

INTENDED USERS AND BENEFICIARIES

The SEARCH units have been designed for kindergarten and 1st-grade students of all ability levels within the normal range. Students should be English-speaking, but need not know how to read. Additional materials for grades 2 and 3 are in preparation.

GOAL(S) OR PURPOSE(S)

The student successfully completing the SEARCH units: (1) Is able to demonstrate increasing control over the acquisition of social information and experience, (2) is able to demonstrate more effective processing of social studies information and conceptual knowledge, and (3) is able to relate the concepts of various social studies disciplines to the student's own social reality.

PATTERNS OF USE

SEARCH units are sequenced within functions. Any one function can be studied independently of the other four. For an integrated interdisciplinary program, all five functions should be studied at each grade level. The functions can also be used to supplement an existing program and can be obtained singly if purchase of the entire program is not possible. The instructional program is accompanied with teacher education material.

ASSESSMENT PROVISIONS

At the beginning of each SEARCH unit, the student takes a three-part pretest that measures competence in that unit. On the basis of that pretest, the student is then placed in the appropriate encounter or research activity. All students complete research and action tasks. They may skip encounter tasks if they are able to demonstrate knowledge of the image and language of a unit. A posttest gages student progress on all three phases of instruction. Pretests and posttests are accompanied with teacher materials for charting student progress.

TIME REQUIREMENTS

Testing and instruction of one SEARCH unit averages from 3-1/2 to 4 hours per unit. There are 10 units in a grade level, or approximately 30 weeks of three half-hour sessions for each grade level.

IMPLEMENTATION PROCEDURES

SEARCH requires only standard audiovisual equipment. No special organizational changes are necessary for the program's implementation. The SEARCH teacher education program works best with at least 3 or 4 hours of preinstructional preparation. The community and families of SEARCH learners seem to relate well to the program, and the content appears socially meaningful to children of varying ethnic and social circumstances.

Summary Cost Information

The kindergarten and grade 1 SEARCH units will be available for approximately $650; this price includes the cost of 20 units ($450), 20 teacher unit notebooks ($140), and a teacher education package ($20). It is noted that the materials will, in all likelihood, be shared by two classes at each stage. Thus, if 120 kindergarten and 1st-grade students were involved, the initial per-pupil cost would be $5.42. Consumables may be replaced at a cost of $60 per grade level for 10 units. This amounts to $2 per student per year. In addition, SEARCH's units are packaged separately and may be purchased at the discretion of the buyer. Thus, if a buyer decided to purchase only six of the stage I (K) units, the cost per student would be reduced further.

The self-instructional teacher education package will permit teachers and curriculum personnel to acquaint themselves with SEARCH and with the procedures required to implement SEARCH's individualized instructional system. The teacher education package is designed to be implemented by local personnel. In addition, a special workshop conducted by a SEARCH staff member can also be arranged as an optional teacher preparation program at the school site. This optional workshop would cost $250 plus expenses.

Personnel Required for Product Adoption and Implementation

No special qualifications or training, aside from the SEARCH teacher education program, are required to being revised continually in order to ascertain and assure who desire to implement SEARCH in their classroom should be able to do so. In order to facilitate optimum implementation of SEARCH's instructional system in classes consisting of 25 or more students, it is recommended that an aide be employed to assist the teacher.

ASSURANCES AND CLAIMS

The SEARCH program, presently under development, is continually being revised in order to ascertain and assure its intrinsic quality. Over a period of 2-1/2 years, some 100 kindergarten students and an equivalent number of 1st-graders participated in the testing of SEARCH units.

Assurances

During SEARCH's 2-1/2-year testing period, there have been no user reports or evaluator observations of harmful psychological, physiological, or social bias effects due to the use of the program. This was not due to chance since a systematic attempt was made in the development of SEARCH's instructional materials to assure that sexism, racism, and other forms of social bias were not perpetuated. A systematic attempt was also made to incorporate instances of affirmative action which would have the effect of promoting social fairness.

External reviewers have attested to the validity of the conceptual base for SEARCH's content. The soundness of SEARCH's instructional design has also been affirmed. One reviewer even ranked SEARCH among the top three of the "new" social studies programs.

It is expected that data regarding a hands-off test of the replicability of SEARCH will be available by November 1975. A SEARCH teacher education program (STEP), a self-instructional program, is also available to further assure the replicability of SEARCH. The instructional units and the teacher education program are housed in individual packages which are readily transportable from the development site to a school and between classes in a school.

Claims

The SEARCH program, being Piaget-based in terms of its instructional plan, does not require students to be able to read and is rich in graphic and manipulative materials. As such, SEARCH accommodates the entry level skills of a great majority of the primary school population and provides experiences appropriate to cognitive and affective stages of development.

Kindergarten and 1st grade SEARCH units have been tested in several classrooms for instructional effectiveness. In the majority of cases, outcomes with respect to SEARCH units met the developers' intentions in terms of expected gains in student achievement. SEARCH also gained the general acceptance of the students, teachers, and administrators at its developmental site.

Logical analyses conducted by external reviewers established the intrinsic quality of SEARCH's content. External reviewers also attested to the harmlessness and social fairness of SEARCH's material. In addition, teachers have commented that the content of SEARCH parallels and further enriches the social studies curriculum used in their school district.

The development of SEARCH has been guided by a comprehensive evaluation/development model consisting of four tryout and three revision stages. The model has provided both logical and empirical feedback to the developers for further revision. Specific evaluation questions were posed at each tryout stage. Tryout data were obtained and documented via structured evaluation procedures and forms. The results of more than 2-1/2 years of testing in the classrooms have shown that, in general, the kindergarten and 1st grade SEARCH program achieves the instructional effects that were planned.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
10 units (individually boxed) per grade level	1 set per class of 32	Only developmental market estimates available: approx. 24.00 per unit; 245.00 per grade level for 10 units	Printed consumable paper replaced yearly: $6.00 per unit; $60.00 per grade level* for 10 units	
10 teacher unit notebooks	1 set per teacher**	70.00 (approx.) for 10	Reusable	
1 SEARCH teacher education package	1 per teacher**	20.00 (approx.)	Reusable	

*Subject to increasing production costs.
**Unit notebooks and teacher education materials may be shared by teachers.

DEVELOPER/AUTHOR:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

Barbara Presseisen, Project Director

AVAILABILITY

Revisions based on materials and systems tryouts will be completed for the stage I (K) SEARCH materials by November 1975. The revised stage II (grade 1) materials will be available by April 1976. Interested parties can make arrangements with the developer to purchase and/or produce from the prototype these kindergarten and 1st-grade materials for the 1975-76 school year. Prototype copies of stages III and IV (grades 2 and 3) will be available by August 1977. An evaluation report on the overall effectiveness of SEARCH K-3 will be completed by November 1977. Contact the developer for information:

Research for Better Schools, Inc.
1700 Market St.
Philadelphia, Pa. 19103

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 009

SOCIAL EDUCATION, YEAR 1

A multimedia instructional package to introduce social concepts about the family to 1st graders

The *Social Education, Year 1 Program,* is a multimedia, multicultural, instructional package including materials for teachers and pupils. Each unit consists of three to seven lessons and includes an instructional manual, a test based on the curriculum, and special multimedia, instructional materials (such as filmstrips, films, audiotapes, puzzles, puppets, teaching pictures, and game cards). The program contains 16 units which focus on the family. Three additional units feature materials that assist the teacher at the beginning and end of the school year and on special occasions throughout the year. Social science concepts are introduced and developed in recurring cycles.

Each unit incorporates specified objectives and the inquiry method to enhance the intellectual process development of young children. The program uses criterion-referenced measures for evaluation purposes. Staff development is built into the instructional units, with lesson planning and all materials furnished for the teacher. In addition, a self-contained, 3-hour multimedia staff development package accompanies instructional materials.

The teacher, through the structured activity, physically involves the pupils in an experience to provide a base for learning. Open-ended questions are asked, and the children's appropriate responses are accepted. The teacher uses instructional techniques and materials provided by the program to encourage children to become more actively engaged in the learning process. The teacher leads the children to discover and to elaborate on concepts, asks questions which encourage them to develop logical thinking patterns, and assists them in developing tools for dealing with the social, economic, and political realities of life. The children are given opportunities for self-identification and to develop an appreciation of lifestyles and ethnic and economic groups. Pretests, posttests, and unit tests are administered, and the children's responses are evaluated.

The learners gain self-confidence by succeeding in developing thinking skills without depending on reading. The child is motivated to learn by the enjoyment experienced in the learning situations.

In a sample unit on communication, the children explore the many ways people communicate ideas, instructions, and feelings. The students are encouraged to examine the methods and media by which others communicate—sounds, gestures, pictures, the spoken word, and the written word. Finally, the students are shown how they need these channels of communication to relate to others.

SUBJECT AREA(S)

The purpose of the program is to provide experiences for children which will enable them to develop significant, functional social concepts. Since the 1st graders' experiences are almost totally within their families, the social concepts introduced in the 1st-grade program are about the family. By using the family as a model, the 1st-grade children are introduced to such concepts as interdependence, dependence, roles, communication, and education.

INTENDED USERS AND BENEFICIARIES

Pupils in the program are at a developmental level usually associated with the 1st grade. Although tested primarily with pupils in schools located in low socioeconomic communities, *Social Education* has been used successfully with children in a wide range of socioeconomic communities. Pupils using the program are multiethnic.

Other potential users are the teachers, supervisors, coordinators, and administrators who will implement the program; university professors in teacher education programs; and regional service-center personnel.

GOAL(S) OR PURPOSE(S)

The pupils who participate in this social education program will be able: (1) To develop selected concepts from the social sciences that relate to people in families, (2) to enhance their self-confidence by succeeding in learning without depending on reading ability, (3) to develop their thinking skills, (4) to develop an awareness of cultural diversity, and (5) to enjoy their learning activities.

PATTERNS OF USE

Units can be presented in any order; however, it is recommended that the lessons within each unit be presented in sequence. The numbered units comprise a comprehensive 1-year curriculum which will meet social studies requirements in most States. The three supplemental units may be used separately, in related subjects, or as enrichment materials in art, language study, or in preparation for special days.

ASSESSMENT PROVISIONS

Teachers of the *Social Education Program* are provided with two forms of criterion-referenced evaluation measures for classroom use—proficiency measures (unit tests) and mastery test. The proficiency measures enable teachers to evaluate how well the children have learned the concepts introduced in each unit. The mastery test provides a means for the teacher to evaluate children's mastery of concepts presented during the year, and can also be used, at the teacher's discretion, as a pretest to provide comparison information for the end-of-year administration of the mastery test.

TIME REQUIREMENTS

The product is intended to be used from 20 to 30 minutes daily for approximately 100 teaching days. Total number of teaching days will vary according to the number of lessons selected by teachers from the three supplementary units.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are required. The program does not require a specialist teacher. Any teacher who attends the 3-hour orientation session will be able to implement the program. The lessons may be taught in large or small groups. No special organizational requirements are needed in the school. The program has been adapted successfully in a variety of school settings (traditional and open classrooms, graded or nongraded).

Personnel Required for Product Adoption and Implementation

The *Social Education Program* does not require extensive preservice staff development for teachers. The teaching strategies, questioning sequences, and supporting media for concept development are provided with the instructional materials. A 3-hour teacher orientation package introduces teachers to the program and orients them to the materials. This training might be implemented by a primary supervisor or social studies consultant within the school district.

During the summer the laboratory conducts a 2-day seminar in Austin, Texas, for school personnel identified as teacher trainers to provide further training in teacher orientation package, program goals and premises, program scope and sequence, intellectural process development, use of instructional materials, and evaluation instruments and procedures. Attendance at this seminar is optional. The teacher orientation package may be used successfully by trainers who are unable to attend the seminar. All materials and complete directions for conducting teacher-training sessions are included in the kit.

ASSURANCES AND CLAIMS

Assurances

Formative data obtained from classroom teachers and pupils during the 4-year developmental process were used for revising and refining the program. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the program.

External review of *Social Education, Year I*, curriculum materials and teacher responses to user questionnaires indicated no sexual, racial, social, or other stereotyping or bias. However, an inhouse intern report conducted in late 1973 indicated a tendency for males to play the dominant roles in the materials.

With minimal producer assistance, curriculum materials were field tested in 53 classrooms in Texas, California, Louisiana, and Pennsylvania, and in 11 migrant classrooms in south Texas. Teacher responses to user questionnaires were highly favorable to the program. Since field test, 107 sets of year-1 curriculum materials have been sold to users in at least 13 States.

Claims

Social Education materials have been design tested, pilot tested, and field tested with thousands of children with diverse ethnic and cultural backgrounds. Each of the 380 schools in which the materials were tested has a high concentration of children from low-income families. In addition, external review of the materials indicated a high degree of pedagogical soundness, academic substance, and an effective use of media.

Mastery test results based on curriculum objectives indicate a high percentage (80-95 percent) of the children master program goals. Different ethnic groups are equally successful in meeting these goals.

On standardized social studies tests, children in the *Social Education Program* tend to score higher than children of similar ethnicity in social studies programs at comparison sites.

Teachers and observers report children's interest in the program is quite high, indicating the materials are successful in maintaining pupil attention.

External review of the curriculum materials indicated that they were sufficiently flexible to allow the children to respond from their own social experiences and value orientations and that opportunities are provided for all children to enhance their self-images and for the teacher to accept a variety of value orientations from the children.

The *Social Education Program* is a product of Southwest Educational Development Laboratory's systematic multiyear process of educational development, which begins with context analysis (a study of needs) and moves through design testing, pilot testing, and field testing to diffusion. Revision—based on feedback gathered at test sites—plays a major part throughout the process. Products are systematically refined after design test, after pilot test, and again after the more advanced field test.

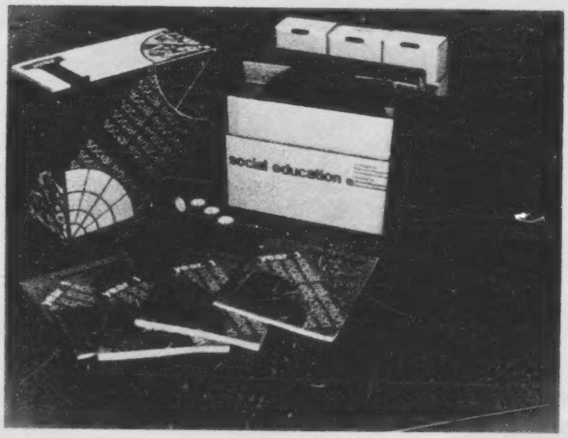
MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
Classroom set including teaching manuals, filmstrips, records, artist pictures, spirit masters	1 set per 30 students	111.00	Reusable; spirit masters consumable in 5 years	
Replacement materials:				
Media package (all artist pictures and spirit masters)	1 set per 30 students	60.00	Consumable in 5 years	
Manuals	1 set	30.00	Reusable	
Records	1 set	6.00	Reusable	
Filmstrips	1 set	12.00	Reusable	
Spirit masters	1 set	9.00	Consumable in 5 years	
Optional materials:				
Audiotapes	1 set	30.00	Reusable	
Pads	1 set	24.00	Consumable yearly	
Teacher materials:				
Staff development kit (filmstrips, audiotapes, manuals)	1 kit per 25 teachers	15.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Helen C. Williamson, Project Coordinator



AVAILABILITY

An orientation filmstrip with accompanying script and program brochure is available on a free loan basis from Southwest Educational Development Laboratory.

Product brochure and *Let's Teach* descriptive booklet are available free from National Educational Laboratories Publishers, Inc.

The product is available from the publisher, copyright 1973 by Southwest Educational Development Laboratory. It becomes public domain after September 1978. Order from:

National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

INFORMATION CURRENT AS OF MARCH 1975 ■

SOCIAL EDUCATION, YEAR 2

A package for 2d graders to develop selected concepts from the social sciences that relate to families in a community

The *Social Education, Year 2 Program*, is a multimedia, multicultural, instructional package including materials for teachers and pupils. Social science concepts from six disciplines are introduced and developed in recurring cycles. Each unit consists of three to seven lessons and includes an instructional manual, a test based on the curriculum, and special multimedia, instructional materials (such as filmstrips, films, audiotapes, puzzles, puppets, teaching pictures, and game cards). The program contains 21 units which focus on many families in a community and the overlapping social, public, and economic activities and organizations which provide for the needs and wants of a community. Three units feature materials that assist the teacher at the beginning and end of the school year and on special occasions throughout the year.

Each unit incorporates specified objectives and the inquiry method to enhance the intellectual process development of young children. The program uses criterion-referenced measures for evaluation purposes. Staff development is built into the instructional units, with lesson planning and all materials furnished for the teacher. In addition, a self-contained, 3-hour multimedia staff development package accompanies instructional materials.

The teacher, through the structured activity, physically involves the pupils in an experience to provide a base for learning. Open-ended questions are asked, and the children's appropriate responses are accepted. The teacher uses instructional techniques and materials provided by the program to encourage children to become more actively engaged in the learning process. The teacher leads the children to discover and to develop logical thinking patterns, and assists the children in developing tools for dealing with the social, economic, and political realities of life. The children are given opportunities for self-identification and to develop an appreciation of lifestyles and ethnic and economic groups. Pretests/posttests and unit tests are administered, and the children's responses are evaluated.

The learners gain self-confidence by succeeding in developing thinking skills without depending on reading. The children are motivated to learn by the enjoyment experienced in the learning situations.

In a sample unit on communities, the children explore how the community offers a living laboratory in which to observe people meeting their needs and interacting with their environment. In this unit the children are provided with an introductory framework for observing and analyzing the components of most modern communities.

SUBJECT AREA(S)

The purpose of the program is to provide experiences for children which will enable them to develop significant, functional social concepts. In the second year of the program, the concept of family introduced in the first year is expanded to include many families in a community. The study of a community includes the study of scarcity and unlimited wants through a study of specialized production, interdependence, exchange, markets, prices, costs, and public policy.

INTENDED USERS AND BENEFICIARIES

Pupils in the program are at a developmental level usually associated with Year 2. Although tested primarily with pupils in schools located in low socioeconomic communities, *Social Education* has been used successfully with children in a wide range of socioeconomic communities. Pupils using the program are multiethnic. Other potential users are the teachers, supervisors, coordinators, and administrators who will implement the program; university professors in teacher education programs; and regional service-center personnel.

GOAL(S) OR PURPOSE(S)

The pupils who participate in this social education program will be able: (1) To develop selected concepts from the social sciences that relate to people in communities, (2) to enhance their self-confidence by succeeding in learning without depending on reading ability, (3) to develop their thinking skills, (4) to develop an awareness of cultural diversity, and (5) to enjoy their learning activities.

SOCIAL EDUCATION

RD 180 010

PATTERNS OF USE

Units can be presented in any order; however, it is recommended that the lessons within each unit be presented in sequence. The numbered units comprise a comprehensive 1-year curriculum which will meet social studies requirements in most States. The three supplemental units may be used separately, in related subjects, or as enrichment materials in art, language study, or in preparation for holidays.

ASSESSMENT PROVISIONS

Teachers of the *Social Education Program* are provided with two forms of criterion-referenced evaluation measures for classroom use—proficiency measures (unit tests) and mastery test. The proficiency measures enable teachers to evaluate how well the children have learned the concepts introduced in each unit. The mastery test provides a means for the teacher to evaluate children's mastery of concepts presented during the year, and can also be used, at the teacher's discretion, as a pretest to provide comparison information for the end-of-year administration of the mastery test.

TIME REQUIREMENTS

The product is intended to be used from 20 to 30 minutes daily for approximately 140 teaching days. Total number of teaching days will vary according to the number of lessons selected by teachers from three supplemental units.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are required. The program does not require a specialist teacher. Any teacher who attends the 3-hour orientation session will be able to implement the program. The lessons may be taught in large or small groups. No special organizational requirements are needed in the school. The program has been adapted successfully in a variety of school settings (traditional and open classrooms, graded or nongraded).

Personnel Required for Product Adoption and Implementation

The *Social Education Program* does not require extensive preservice staff development for teachers. The teaching strategies, questioning sequences, and supporting media for concept development are provided with the instructional materials. A 3-hour Teacher Orientation Package introduces teachers to the program and orients them to the materials. This training might be implemented by a primary supervisor or social studies consultant within the school district.

During the summer the Laboratory conducts a 2-day seminar in Austin, Texas, for school personnel identified as teacher trainers to provide further training in Teacher Orientation Package, program goals and premises, program scope and sequence, intellectural process development, use of instructional materials, and evaluation instruments and procedures. Attendance at this seminar is optional. The Teacher Orientation Package may be used successfully by trainers who are unable to attend the seminar. All materials and complete directions for conducting teacher-training sessions are included in the kit.

ASSURANCES AND CLAIMS

Assurances

Formative data obtained from classroom teachers and pupils during the 3-year developmental process were used for revising and refining the program. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the program.

External review of *Social Education, Year 2* curriculum materials and teacher responses to user questionnaires indicated no sexual, racial, social, or other stereotyping or bias. However, an inhouse intern report conducted in late 1973 indicated a tendency for males to play the dominant roles in the materials.

With minimal producer assistance, curriculum materials were field tested in 53 classrooms in Texas, California, Louisiana, and Pennsylvania, and in 12 migrant classrooms in south Texas. Teacher responses to user questionnaires were highly favorable to the program. Since field test, 113 sets of year-2 curriculum materials have been sold to users in at least 12 States.

Claims

Social Education materials have been design tested, pilot tested, and field tested with thousands of children with diverse ethnic and cultural backgrounds. Each of the 380 schools in which the materials were tested has a high concentration of children from low-income families. In addition, external review of the materials indicated a high degree of pedagogical soundness, academic substance, and an effective use of media.

Mastery test results based on curriculum objectives indicate a high percentage (80-95 percent) of the children master program goals. Different ethnic groups are equally successful in meeting these goals.

On standardized social studies tests, children in the *Social Education Program* tend to score higher than children of similar ethnicity in social studies programs used at comparison sites.

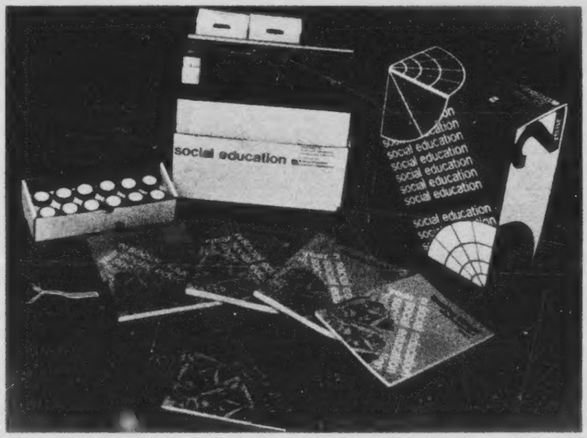
Teachers and observers report children's interest in the program is quite high, indicating the materials are successful in maintaining pupil attention.

External review of the curriculum materials indicated that they were sufficiently flexible to allow the children to respond from their own social experiences and value orientations and that opportunities are provided for all children to enhance their self-images and for the teacher to accept a variety of value orientations from the children.

The *Social Education Program* is a product of Southwest Educational Development Laboratory's systematic multiyear Process of Educational Development, which begins with context analysis (a study of needs) and moves through design testing, pilot testing, and field testing to diffusion. Revision—based on feedback gathered at test sites—plays a major part throughout the process. Products are systematically refined after design test, after pilot test, and again after the more advanced field test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student materials:				
Classroom set including teaching manuals, filmstrips, records, artist pictures, spirit masters	1 set per 30 pupils	189.00	Reusable; spirit masters consumable in 5 years	
Core package	1 set per 30 pupils	78.00	Consumable in 5 years	
Teacher materials:				
Staff Development Kit (filmstrips, audiotapes, manuals)	1 set per 30 pupils	15.00	Reusable	
Teacher package	1 set per 30 pupils	123.00	Reusable	
Replacement materials:				
Media package (including all artist pictures and spirit masters)	1 set per 30 pupils	75.00	Consumable in 5 years	
Manuals	1 set per teacher	42.00	Reusable	
Records	1 set per classroom	18.00	Reusable	
Filmstrips	1 set per classroom	32.00	Reusable	
Curriculum spirit masters	1 set per classroom	9.00	Consumable in 5 years	
Optional materials:				
Audiotapes	1 set per classroom	60.00	Reusable	
Pads for curriculum	1 set per 30 pupils	18.00	Consumable yearly	



DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Helen C. Williamson, Project Coordinator

AVAILABILITY

An orientation filmstrip with accompanying script and program brochure is available on a free loan basis from Southwest Educational Development Laboratory.

Product brochure and "Let's Teach" descriptive booklet are available free from National Educational Laboratories Publishers, Inc.

The product is available from the publisher, copyright 1973 by Southwest Educational Development Laboratory. It becomes public domain after September 1978. Order from:

National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 011

SOCIAL EDUCATION, YEAR 3

An introduction to basic relationships among lifestyles, environments, and traditions for 3d graders

The *Social Education, Year 3 Program*, is a multimedia, multicultural instructional package including materials for teachers and pupils. Social science concepts from six disciplines are introduced and developed in recurring cycles. Each unit consists of three to seven lessons and includes an instructional manual, a test based on the curriculum, and special multimedia, instructional materials (such as filmstrips, films, audiotapes, puzzles, puppets, teaching pictures, and game cards). The program contains 16 units which focus on the study of a variety of cultures under contrasting geographic conditions and which represent the simple and the complex, the urban and the rural, and the old and the new. Two units feature materials that assist the teacher at the beginning and end of the school year. One unit is especially designed to help the child develop a greater appreciation of the cultural and historical differences of four cultures in the United States.

Each unit incorporates specified objectives and the inquiry method to enhance the intellectual process development of young children. The program uses criterion-referenced measures for evaluation purposes. Staff development is built into the instructional units, with lesson planning and all materials furnished for the teacher. In addition, a self-contained, 3-hour multimedia staff development package accompanies instructional materials.

The teacher, through the structured activity, physically involves the pupils in an experience to provide a base for learning. Open-ended questions are asked, and the children's appropriate responses are accepted. The teacher uses instructional techniques and materials provided by the program to encourage children to become more actively engaged in the learning process. The teacher leads the children to discover and to elaborate on concepts, asks questions which encourage the children to develop logical thinking patterns, and assists the children in developing tools for dealing with the social, economic, and political realities of life. The children are given opportunities for self-identification and to develop an appreciation of lifestyles and ethnic and economic groups. Pretests, posttests, and unit tests are administered and the children's responses are evaluated.

The learners gain self-confidence by succeeding in developing thinking skills without depending on reading. The children are motivated to learn by the enjoyment experienced in the learning situations.

In a sample unit called "The Weather Worriers," the children explore how various cultures have developed ways of handling the universal problem of adapting to temperature. The students learn that human beings are learning to control environments and to invent artificial environments in which to live. The unit draws from the disciplines of biology, physical anthropology, geography, sociology, cultural anthropology, economics, and psychology.

SUBJECT AREA(S)

The purpose of the program is to provide experiences for children which will enable them to develop significant, functional social concepts. In the third year of the program, the children are introduced to basic relationships among lifestyles, environments, and traditions. Through the study of a variety of cultures, the students develop an understanding of their own culture and their reactions to life situations. The cultures studied exist under contrasting geographic conditions and represent the simple and complex, the urban and rural, and the old and new. Sample titles of units are "We Need Each Other," "A Way of Life," "Food for Thought," "Tell Me Why," "The Dream Animal," and "Kith and Kin."

INTENDED USERS AND BENEFICIARIES

Pupils in the program are at a developmental level usually associated with the 3d grade. Although tested primarily with pupils in schools located in low socioeconomic communities, *Social Education* has been used successfully with children in a wide range of socioeconomic communities. Pupils using the program are multiethnic. Other potential users are the teachers, supervisors, coordinators, and administrators who will implement the program; university professors in teacher education programs; and regional service-center personnel.

GOAL(S) OR PURPOSE(S)

The pupils who participate in this social education program will be able: (1) To develop selected concepts from the social sciences that relate to people in communities, (2) to enhance their self-confidence by succeeding in learning without depending on reading ability, (3) to develop their thinking skills, (4) to develop an awareness of cultural diversity, and (5) to enjoy their learning activities.

PATTERNS OF USE

Units can be presented in any order; however, it is recommended that the lessons within each unit be presented in sequence. The numbered units comprise a comprehensive 1-year curriculum which will meet social studies requirements in most States. The three supplemental units may be used separately, in related subjects, or as enrichment materials in art, language study, or in preparation for special days.

ASSESSMENT PROVISIONS

Teachers of the *Social Education Program* are provided with two forms of criterion-referenced evaluation measures for classroom use—proficiency measures (unit tests) and mastery test. The proficiency measures enable teachers to evaluate how well the children have learned the concepts introduced in each unit. The mastery test provides a means for the teacher to evaluate children's mastery of concepts presented during the year, and can also be used, at the teacher's discretion, as a pretest to provide comparison information for the end-of-year administration of the mastery test.

TIME REQUIREMENTS

The product is intended to be used from 30 to 45 minutes daily for approximately 140 teaching days. Total number of teaching days will vary according to the number of lessons selected by teachers from the three supplemental units.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are required. The program does not require a specialist teacher. Any teacher who attends the 3-hour orientation session will be able to implement the program. The lessons may be taught in large or small groups. No special organizational requirements are needed in the school. The program has been adapted successfully in a variety of school settings (traditional and open classrooms, graded or nongraded).

Personnel Required for Product Adoption and Implementation

The *Social Education Program* does not require extensive preservice staff development for teachers. The teaching strategies, questioning sequences, and supporting media for concept development are provided with the instructional materials. A 3-hour teacher orientation package introduces teachers to the program and orients them to the materials. This training might be implemented by a primary supervisor or social studies consultant within the school district.

During the summer the Laboratory conducts a 2-day seminar in Austin, Tex., for school personnel identified as teacher trainers to provide further training in the teacher orientation package, program goals and premises, program scope and sequence, intellectual process development, use of instructional materials, and evaluation instruments and procedures. Attendance at this seminar is optional. The teacher orientation package may be used successfully by trainers who are unable to attend the seminar. All materials and complete directions for conducting teacher training sessions are included in the kit.

ASSURANCES AND CLAIMS

Assurances

Formative data obtained from classroom teachers and pupils during the 3-year developmental process were used for revising and refining the program. These data provided no indication of sociological, psychological, or physical harm to pupils exposed to the program.

External review of *Social Education, Year 3,* curriculum materials and teacher responses to user questionnaires indicated no sexual, racial, social, or other stereotyping or bias. However, an inhouse intern report conducted in late 1973 indicated a tendency for males to play the dominant roles in the materials.

With minimal producer assistance, curriculum materials were field tested in 41 classrooms in Texas, Louisiana, and California. Teacher responses to user questionnaires were highly favorable to the program. Since field testing, 117 sets of year-3 curriculum materials have been sold to users in at least 12 States.

Claims

Social Education materials have been design tested, pilot tested, and field tested with thousands of children with diverse ethnic and cultural backgrounds. Each of the 380 schools in which the materials were tested has a high concentration of children from low-income families. In addition, external review of the materials indicated a high degree of pedagogical soundness, academic substance, and an effective use of media.

Mastery test results based on curriculum objectives indicate a high percentage (80-95 percent) of the children master program goals. Different ethnic groups are equally successful in meeting these goals.

Teachers and observers report children's interest in the program is quite high, indicating the materials are successful in maintaining pupil attention.

External review of the curriculum materials indicated that one impact of the use of the materials was the creation of pupil awareness of the world's cultural diversity.

The *Social Education Program* is a product of Southwest Educational Development Laboratory's systematic multiyear process of educational development, which begins with context analysis (a study of needs) and moves through design testing, pilot testing, and field testing to diffusion. Revision—based on feedback gathered at test sites—plays a major part throughout the process. Products are systematically refined after design test, after pilot test, and again after the more advanced field test.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Student Materials:				
Classroom set including teaching manuals, records, filmstrips, curriculum spirit masters, films, film leader, student books, tests	1 set per classroom	366.00	Reusable; except spirit masters	
Core package (records, filmstrips, films, and student books)		237.00	Reusable	
Teacher package (card media, transparencies, clear leader film, manuals, tests, and pupil performance assessment pad)		129.00	Reusable; except clear leader film	
Replacement Materials:				
Media package		81.00	Reusable	
Manuals		51.00	Reusable	
Records		54.00	Reusable	
Filmstrips		66.00	Reusable	
Curriculum spirit masters		15.00	Consumable in 5 years	
Films:		75.00	Reusable	
Film leader		4.50	Consumable yearly	
Student books		54.00	Reusable	
Optional Material:				
Audiotapes		210.00	Reusable	
Pads for curriculum		36.00	Consumable yearly	
Teacher training kit with 2 filmstrips, audiotapes, manuals	1 set per 25 teachers	15.00	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Project Director
Helen C. Williamson, Project Coordinator

AVAILABILITY

An orientation filmstrip with accompanying script and program brochure is available on a free loan basis from Southwest Educational Development Laboratory.

Product brochure and *Let's Teach* descriptive booklet are available free from National Educational Laboratories Publishers, Inc.

The product is available from the publisher, copyright 1973 by Southwest Educational Development Laboratory. It becomes public domain after September 1978. Order from:

National Educational Laboratories Publishers, Inc.
813 Airport Blvd.
Austin, Tex. 78702

social education
social education

INFORMATION CURRENT AS OF MARCH 1975 ■

RELEVANT EXPLORATIONS IN ACTIVE LEARNING (REAL) SETS I AND II

A set of resource materials designed to help people better understand themselves and their potentials

Relevant Explorations in Active Learning (REAL) is a set of written and recorded resource materials called Minipacs. There are two versions: One for high school students and another for educational staff. The Minipacs are divided into two sets (REAL I and II). Participants may use individual Minipacs or the complete sets, either independently or in a group. Each Minipac focuses on one kind of human experience relevant to all learners.

A key person in a school, called a materials manager, has the responsibility of providing learning experiences with REAL Minipacs. The materials manager manages the Minipac materials and the learning environment. By identifying students and adults who wish to be involved in a group, or in individual Minipac experience, and providing Minipac materials and guidance in their use, the materials manager may contribute to the success for use of REAL Minipacs.

The content of the Minipacs is aimed at helping people better understand themselves and their potentials. Each Minipac addresses a particular psychosocial issue which all human beings confront to some degree at some time in their lives. As learners experience a Minipac, they take an active role in the self-discovery process.

SUBJECT AREA(S)

These materials are intended to foster personal growth in the affective areas of learning.

INTENDED USERS AND BENEFICIARIES

Minipacs are designed for use by adults in educational settings (such as teachers, counselors, and paraprofessionals) and by high school students. The Minipacs provide opportunities for both adults (e.g., teachers) and high school students to learn on their own and in small groups. Adults may decide to become involved with Minipacs because they want or need to learn more about the Minipac topics. One of the benefits for a counselor who has already experienced a Minipac might be that the counselor is better able to facilitate a student's use of Minipacs. Minipacs can thus offer an adult a personal learning experience as well as a means in the school setting to facilitate student learning.

GOAL(S) OR PURPOSE(S)

Goals of REAL are to enable users: (1) To have a clearer understanding of the Minipac ideas, (2) to have identified related values and needs that play an important part in their lives, (3) to have a clearer understanding of possible conflicts and problems they have experienced in terms of the Minipac topic, and (4) to have identified some new desirable actions or answers to problems associated with the Minipac topic.

PATTERNS OF USE

Minipacs are intended to be resource materials, rather than a predefined curriculum. The users will need to make their own plans and decisions about how the Minipacs will be incorporated in learning experiences. One way to apply them is to have users attend to, and learn from, the things they do about such planning and decisionmaking.

It is possible for an individual to use a Minipac entirely alone. One way teachers have used them is by introducing them to students, establishing procedures and outcomes expected, and then letting students proceed in self-directed learning. Another way has been to establish procedures for small groups of students to use Minipacs and then share group outcomes with the teacher if desired. Teachers and counselors have also used Minipacs by interacting with students and guiding the activities as they go through them. Adults have also used Minipacs in these different ways. Minipacs have been used as core materials in workshop designs.

The assumptions underlying the use of these independent packages in schools are as follows:

1. For either set I or set II, there is no prescribed order that yields the most "effect" on learners.

2. Minipac usage for conditions of development and evaluation has been divided into two sets. The selection of topics for set I is in general areas of experience common to most learners. The topics focus on many of the problems learners encounter. Topics for set II focus on learning about the learning process.

3. Each Minipac possesses the potential for accommodating a large number of variations and needs. The teacher or counselor will be able to use the Minipac as a complete package for independent or group work and use various components of the Minipac when developing special units in related areas. Each component is designed to be independent of the others, with the exception of the directions booklets.

ASSESSMENT PROVISIONS

No screening provisions are made for initial entry into the system. Once working with the Minipacs, participants use self-assessment techniques to monitor their understandings.

TIME REQUIREMENTS

It is desirable to go through all the ideas and activities of a particular Minipac. It can be expected that it will take about 5 hours to do so. It may take longer, depending on how much self-exploration, contemplation, and sharing individual users care to engage in. Shorter experiences can be conducted using parts of a Minipac. Most often, one Minipac is experienced in a sequence of meetings such as five consecutive 45-minute classroom periods. Not all the ideas or activities proposed in the materials may be relevant to some users or feasible in a given situation.

IMPLEMENTATION PROCEDURES

At the time of this writing, the REAL Minipacs are under development. The implementation procedures described are those which are recommended and are being used during the testing period.

Those persons interested in using REAL in a program or course are invited to a 1-day orientation workshop. The purpose of the workshop is to introduce REAL, provide active participation in a group Minipac experience, explore ways to structure learning experiences with Minipacs, and plan for back-home use requirements.

Those persons desiring to experience the adult version of REAL with a group need to get a schedule and meet in a workshop setting for approximately 30-40 hours. Conditions for the workshop site should include: (1) A comfortable room, preferably carpeted, large enough to allow groups of five to seven to work without interfering with each other; (2) comfortable chairs and tables for small groups of five to seven, and (3) beverages and refreshments available in the room, if possible.

Generally, it is expected that someone will take the role of introducing the Minipacs and direct their use.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

REAL is still under development and testing as of this writing. In preliminary trials, users of this system have been repeatedly asked for feedback. There have been no reports to date of actual instances of, or serious concern about, physical, psychological, or sociological harm. A question raised by reviewers in the field concerning early prototype materials was used as a basis for deleting some photographs, illustrations, and terms in the current versions.

Assurances of Social Fairness

Social fairness issues have been considered in creating and revising these materials. Guidelines supplied by NIE concerning sexism have been especially attended to.

Assurances of Replicability

The system is being designed to be used as resource materials according to the desires of students and teachers. Issues of use are being explored in current evaluations which will be reported by November 1975.

Claims of Effectiveness

Reports of effectiveness will be based on evaluation studies underway at the time of this writing. They will be available by November 1975.

Claims of Careful Product Development

This system is being developed over a 3-year period involving repeated rounds of trial and revision. Evaluation includes pilot trials, interim formative testing, and a field test focused on dissemination issues.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Minipacs (may be purchased individually or as sets)	1 per participant	To be announced	Key ideas booklet and sheet reusable	
Cassette recorders	1 per learning group			Implementer
Newsprint				Implementer
Masking tape				
Felt tip markers				

DEVELOPER/AUTHOR:

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710 SW. Second Ave.
Portland, Oreg. 97204

Gary Boyles, Author/Developer, Program Associate
Normandie Phelps, Assistant Author/Developer, Staff Specialist II

AVAILABILITY

Copyright is held by the Northwest Regional Educational Laboratory, and *Relevant Explorations in Active Learning* (REAL) (14 Minipackages) will be available in fall 1975 from:

Xicom, Inc.
RFD 1, Sterling Forest
Tuxedo, N.Y. 10987

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 013

PEOPLE AND PROBLEMS

A film created for teachers to stimulate thought and discussion on developing problem-solving skills of students

People and Problems is a 10-minute film developed to stimulate thought and discussion on problem solving. Designed for adults, the film is highly motivating and is intended to interest teachers in developing problem-solving skills in their students. The film depicts persons solving problems in everyday life so that teachers will see the value of teaching problem-solving skills in the classroom.

Problem solving is presented as an important and challenging aspect of everyone's everyday life. Through scenes of everyday problem-causing events, an awareness is created of how often everyone is confronted with problems. The film promotes an understanding of how important problem-solving skills are to everyone in our society. Also emphasized is that problem solving is a positive force in our lives. A process which children and adults can use is illustrated through the action in the film. Although the process is flexible, the film represents it as a more effective alternative to the familiar trial-and-error procedure. A brief paper provided with the film gives suggestions to stimulate discussion after the viewing.

SUBJECT AREA(S)

The major objective of the film is affective—to motivate and interest teachers and children in problem solving. Content emphasizes:

(1) Problems are a part of our daily lives.

(2) It's important to be able to solve problems effectively.

(3) Problems are a positive force in life.

(4) Using a method or process to solve problems increases one's effectiveness.

INTENDED USERS AND BENEFICIARIES

Although *People and Problems* was designed primarily for teachers, the developers believe the film might be highly motivating to children as well, and could probably be used to stimulate interest in problem-solving skills in all age groups.

GOAL(S) OR PURPOSE(S)

The primary goal of the film is to motivate teachers to develop problem-solving skills in their students. When the film is shown to children, the primary goal is to interest them in developing effective problem-solving skills. Secondary goals are to illustrate how important problem solving is in our society and to introduce an effective process with which to attack problems.

PATTERNS OF USE

People and Problems is designed to be used as an introduction to a problem-solving curriculum or at any point in the curriculum to generate interest in problem solving. With teachers, it can be used as the introduction to a staff development workshop or any workshop emphasizing "learning to learn" skills. It can be used independently to generate ideas.

ASSESSMENT PROVISIONS

No formal testing procedures are included with this product.

TIME REQUIREMENTS

People and Problems is a 10-minute film. Discussion after screening can be extended or limited to suit the purpose of the viewers.

IMPLEMENTATION PROCEDURES

No special procedures are required to implement this product.

ASSURANCES AND CLAIMS

No social bias has been brought to the attention of the multiethnic program staff. Care was taken to include multiethnic representation and a balance of nonstereotypic sex roles in the film.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
1 film	1 per school district	Material under development and not available	Reusable	
Procedure paper	1 per instructor	Same as above	Reusable	

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Murray Newman, Program Coordinator

AVAILABILITY

The film exists in prepublication form only; no copies are available for distribution at this time.

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

As of April 1975 the product is available from its developer:

Metric Studies Center
American Institutes for Research
P.O. Box 1113
Palo Alto, Calif. 94302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 014

SOCIAL DEVELOPMENT AND BEHAVIOR: AN ABSTRACT BIBLIOGRAPHY

An annotated bibliography referring to children's peer relationships, interpersonal competence, social attitudes, and sociometric techniques

This selective annotated bibliography contains references to social development and behavior in children. Entries are from *Research in Education* (RIE) and *Current Index to Journals in Education* (CIJE), January 1970 through March 1974. Topics include peer relationships, interpersonal competence, social attitudes, socialization, and sociometric techniques.

Subject areas of documents cited in the bibliography include: Children's social development and behavior, peer relationships, interpersonal relationships, and children's socialization.

INTENDED USERS AND BENEFICIARIES

This bibliography was prepared to alert early childhood teachers and administrators to materials in the ERIC system that are related to the social development and social behavior of children. This publication would also be of interest to social workers, psychologists, and researchers.

GOAL(S) OR PURPOSE(S)

The goal of this bibliography is to provide a useful list of current research reports, program descriptions, and discussions in response to numerous requests for information on the influence of the child's environment and interpersonal relationships.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
805 West Pennsylvania Ave.
Urbana, Ill. 61801

Christine M. Shea, Compiler

AVAILABILITY

Order No. ED 091 084, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

A CRITICAL ANALYSIS OF VALUES EDUCATION RESOURCES

A paper to aid in the selection of values education materials

The primary purpose of this paper is to help social studies educators identify and select appropriate values education materials. Building on an initial ERIC/ChESS volume *Values Education: Approaches and Materials*, the author of this companion work provides narrative analyses and checklists of characteristics for nearly 100 sets of elementary and secondary, student and teacher social studies materials. Reflecting a variety of approaches to values education, the materials analyzed include those which have been explicitly designed to teach values development. Each item is analyzed according to four general categories: Its descriptive characteristics (e.g., title and grade level), preconditions for use (e.g., classroom and school atmosphere needed when using the materials), substantive characteristics (e.g., objectives and type of student activities), and evaluative characteristics (e.g., provision for student evaluation and field test information). An annotated bibliography on values education materials is included in the paper.

SUBJECT AREA(S)

Social Studies and Values Education

This paper includes short analyses of values education materials, presentation of typology for values education approaches, explanation of analysis instrument and checklist chart, and annotated bibliography.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are social studies teachers (K-12), department chairpersons, supervisors, consultants, field agents; and curriculum developers and decisionmakers and teacher trainers (inservice and preservice) in a variety of subject areas.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Douglas P. Superka, Author

AVAILABILITY

This paper will be available September 1975 from:
Social Science Education Consortium
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 016

EDUCATING PRISONERS FOR SOCIALLY CONSTRUCTIVE ROLES

A document concerned with the prevention of juvenile delinquency, and the education and certification of teachers of inmates

This document reviews problems, alternatives, and recent development in the education of prisoners. The authors state as a guiding argument that, while inmates are severely handicapped according to traditional academic measures in terms of the current movement in education towards individualized instructions, nowhere is there a more fertile ground for receptive students than in correctional institutions. The following problems are cited: The lack of programs to prepare inmates for socially constructive roles in communities, job discrimination against former inmates (the new careers program for rehabilitated offenders is discussed as a solution for this), and the poverty background of many prisoners. The document reports specifically on work release programs; the prevention of juvenile delinquency through education; vocational, career, and college programs; and the education and certification of teachers of inmates. Appendixes are: (a) "A Summary of Teacher Corps Corrections Projects: 1968-74," (b) "College Programs in State and Federal Penal Institutions" (listed by State), and (c) "National Survey of Postsecondary Education Programs for Incarcerated Offenders."

SUBJECT AREA(S)

Subject areas include the education of prisoners, the prevention of juvenile delinquency, and the education and certification of teachers of inmates.

INTENDED USERS AND BENEFICIARIES

Educators and administrators concerned with the rehabilitation of criminal offenders are the intended users.

GOAL(S) OR PURPOSE(S)

The goal of this product is to provide an overview of prison-based education, including recent developments and alternatives for the future.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
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INFORMATION CURRENT AS OF MARCH 1975 ■

PREPARING SCHOOL PERSONNEL RELATIVE TO VALUES: A LOOK AT MORAL EDUCATION IN THE SCHOOLS

A clarification of the development of moral judgment

This paper clarifies the development of moral judgment and the means by which educators can stimulate this development. Moral teaching is defined as the process of open discussion aimed at stimulating the child to move to the next step in development. Research evidence shows that internalized principles of moral judgment cannot be taught, but their development can be encouraged.

The main conclusions of the paper are: (1) The definition of "good behavior" should not be relative only to the standards of biases of the teacher; (2) the teacher's initial task is to understand, from the child's viewpoint, what is good and bad about a given behavior; (3) since the child's judgment follows a developmental sequence, some thinking can be defined as more morally mature than others; (4) it is psychologically and ethically legitimate to encourage the child to act in accordance with the highest level of judgment; and (5) insofar as discrepancies between judgment and action reflect a form of cognitive conflict that may serve to promote development, encouraging correspondence between judgment and behavior will be a stimulus to further development, as well as changes in overt behavior. The teacher must be concerned about the child's moral judgments rather than about conformity with the beliefs and judgments of the teacher.

SUBJECT AREA(S)

Moral judgment and development in the child and the role of the teacher in fostering moral development.

INTENDED USERS AND BENEFICIARIES

Elementary and secondary school personnel and collegiate trainers are the intended users of this publication.

GOAL(S) OR PURPOSE(S)

This publication is intended to familiarize the American teacher with recent psychological and philosophical work on the problem of moral education and to present a model for understanding and teaching morality.

DEVELOPER/AUTHOR:

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Lawrence Kohlberg
Robert L. Selman

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 018

PREPARING TEACHERS, STUDENTS, AND CITIZENS TO DEAL CONSTRUCTIVELY WITH THE PROBLEMS AND POTENTIALITIES OF AGING

A monograph to understand the physical and psychological aspects of aging

This monograph offers information, suggestions, and proposals to teachers, students, and citizens to increase their understanding of the aging process, in both its physical and psychosociological aspects. Part I, "What is Aging?," examines various aspects of aging, some of its major characteristics, and what it is like to grow old in the United States today. Part II is concerned with the physical aspects of aging: How the body changes; the aging processes of human cells, human tissue, and organ systems; aging and disease; Some theories on why aging takes place and suggestions on how to deal constructively with aging. Part III examines some psychosociological aspects of aging, with emphasis on ways to encourage continued psychological and social involvement with the rest of the world. Appendixes provide details of resources for additional information. Appendix A describes programs for senior citizens, specifically those provided by ACTION and the Department of Labor. Appendix B lists materials available free from the Administration on Aging. Appendix C gives the locations of all regional and State agencies on aging.

SUBJECT AREA(S)

Aging, especially the physical process and the psychosociological effects, is discussed in this monograph.

INTENDED USERS AND BENEFICIARIES

This publication is directed at students, teachers, and citizens. It is hoped that the information and suggestions in the monograph will aid the reader in increasing personal and professional capacity.

GOAL(S) OR PURPOSE(S)

This monograph contains information to help increase understanding of the process of aging in both its physical and psychosocial characteristics.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Sally A. Althoff

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 180 019

SOCIAL DEVELOPMENT IN YOUNG CHILDREN: A REPORT FOR TEACHERS

A review of the current psychological research on social development in children ages 3-8

A brief (approximately 100 pages) review of the current psychological research on social development in children 3 to 8 years old has been prepared in a format which makes this information accessible and comprehensible to teachers. Basic research findings are tied to specific suggestions for classroom practices, so that the relevance of the psychological research is clearly apparent to the reader.

Topics covered in the report include aggression, prosocial behavior, moral development, motivation to achieve in school, and peer interaction. Each major chapter is introduced by a recommendations digest which summarizes suggested teaching techniques and the research rationales on which they are based. Extensive reference sections offer documentation and possibilities for further reading in particular areas.

The report is designed to serve as a reference for individual classroom teachers, as well as a focal point for group discussions in formal or informal teacher training situations.

SUBJECT AREA(S)

The report reviews the psychological research literature on aggression, prosocial behavior, moral development, motivation to achieve in school, and peer interaction in 3- to 8-year-old children. The report suggests teaching techniques consistent with psychological findings in these areas of social development.

INTENDED USERS AND BENEFICIARIES

The potential audience for this report includes practicing preschool and early elementary school (K to 3) teachers, teachers in training, and personnel involved in training or supervising other teachers.

The report is brief and direct enough to be used by busy teachers who have little time to devote to outside reading. It is suitable for graduates of 2-year associate degree programs, as well as for teachers with more extensive training.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To provide teachers of 3- to 8-year-old children with a coherent understanding of current psychological knowledge about young children's social behavior, (2) to suggest teaching techniques consistent with current psychological research findings, and (3) to provide extensive references for further reading in particular subject areas.

PATTERNS OF USE

This report may be used independently by individual classroom teachers, but it is especially well suited for use in informal or formal training sessions. Preliminary audience reactions to the report indicated that it can provide a stimulating focus for discussion during inservice training sessions. It may also serve as a text in academic courses, perhaps in conjunction with other texts covering specific areas. The report was prepared jointly with a similar report, *Cognitive Development in Young Children: A Report for Teachers*. The two books, which share similar goals and formats, can be used together to cover a broader range of psychological findings on child development.

Recommendations digests, which introduce each major section of the report, have been designed as summaries of the major psychological points made in each section and the specific teaching techniques which are consistent with the psychological findings. These digests can be used as quick reference guides and may be particularly valuable for training classroom personnel who are not comfortable with larger amounts of written material.

TIME REQUIREMENTS

Most teachers could carefully read through the report in 3 to 4 hours. A preliminary skimming of the recommendations digests could be accomplished in one-half hour or less.

MATERIALS AND EQUIPMENT

Copies of the reports will be available through the Government Printing Office. The cost per copy has not been established at this writing.

ASSURANCES AND CLAIMS

The preparation of this report was guided by a desire to preserve a cautious and moderate perspective on new research in theories, in order to minimize the dangers of premature application of incompletely tested psychological conclusions. Recommendations are only included which experimental psychological research indicates may be beneficial. The teaching techniques suggested are not given with any guarantees of effectiveness, although some have been used successfully in research situations or in innovative educational programs. In most cases, the report suggests strategies which teachers can adapt to the needs of their own classrooms.

The report was carefully edited to eliminate potential biases related to sex, race, religion, age, or socioeconomic stereotypes.

A preliminary draft of the report was read and discussed by 25 practicing preschool and early elementary school teachers in the Seattle, Washington, area. All teachers found something of value in the report, although certain sections were more relevant to some groups of teachers than to others. The teachers' written reactions to the report indicate that they found it useful in broadening their awareness of recent psychological research, suggesting new techniques based on that research, and reminding them of principles and techniques they had forgotten.

DEVELOPER/AUTHOR:

Developmental Psychology Laboratory NI-25
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Wendy Conklin Shelton, Author
Ronald G. Slaby, Author
Halbert B. Robinson, Author

AVAILABILITY

Social Development in Young Children: A Report for Teachers **has been submitted to the National Institute of Education for publication and dissemination.**

INFORMATION CURRENT AS OF MARCH 1975 ■

SOCIAL ORGANIZATION OF THE HIGH SCHOOL

Training materials to help educational administrators and teachers look at educational encounters in terms of social action organization

Social Organization of the High School (SOHS) provides a set of field-generated training materials for educational administrators, educational researchers, and teachers. Three major units each center on one key concept. The materials are arranged in such a fashion that the learner first views the high school as a total social system, then proceeds to look at the structural components of that social system and finally begins to observe the social action inherent in establishing rules and behavior guides within the school. Each unit is self-contained in that it can be used separately for specific training purposes, but the inherent value of the approach is in looking at the school as a total system. The basic component of each unit is a set of field notes which were gathered in three high schools—one inner city, one suburban, and one rural—during a 3-year study. The field notes are arranged so that particular concepts dealing with the social organization of the high school emerged from the materials themselves. There are introductory materials to the total program and to each unit designed to prepare the learner to use the materials. An analytic section following each section and at the end of the materials is designed to give the learner the experience of analyzing field data. A book of readings dealing with field research techniques is also part of the materials.

SOHS represents an approach to looking at educational encounters in terms of their organization in social action. A number of recent social commentators on education have described the high school, for example, as a focal point of current educational and social problems. There is increasing evidence that more socialization, and possibly more learning, takes place in peer-mediated social systems in the high school; and yet we know little about the optimum organization to facilitate such learning and nothing about how such systems interact with the formal organization of the school. This results, in large measure, from the fact that studies and, consequently, materials in education have tended to focus on the individual student as a learner. There has also been a failure to look at the social organization of education as a natural setting for learning because most organizational theory and methodology in education comes from a concern with administration and management, and so intersects with the literature on formal organizational analysis. While learning studies focus on students, organizational studies focus on adults. Yet, current trends in education—emphasis on affective and humanistic education, behavior modification, encounter and sensitivity programs, open classrooms, and greater peer group reference in governance—indicate that educators are beginning to sense that the informal social systems in schools can be primary facilitators for learning. As a result, there has been a growing movement to apply the techniques and conceptual methods of anthropology to education. Most administrators and teachers and many educational researchers were prepared in schools of education to a tradition of educational research which was highly analytic and purported to present interrelationships among elements of a system which were conceptually independent of any given situation. The ethnographic materials which are being developed in education today, however, are holistic, situational, descriptive, nonanalytic, and generally designed to result in a statement of system characteristics rather than of the inevitable association of the elements within the system. As a result, there is a growing need for materials designed to prepare educators to use field-generated data and results as a means of improving educational practice. At the same time, such materials can also be used to broaden the social perspectives of educational researchers.

In using these materials, the learner is presented with actual field notes which have been extracted from the field-journals of individual anthropologists studying collectively three high schools and which are arranged to inform specific conceptual areas in the social organization of high schools. The learner is first introduced to the general notion of social, as contrasted to formal, organization of the school and then is given an extensive description of each of the three school sites. The three units are designed so as to draw field note material from each of the three (urban, suburban, and rural) high school sites so that there is also the opportunity to look comparatively at geographical, demongraphic, organizational, and cultural differences. The materials are programed so that the student proceeds to draw inferences by individual and social agendas, make comparisons, and develop tentative hypotheses about important concepts in the social organization of schools. At the same time, the student is given materials dealing with general concepts of social organization and with the field methodology used to gather the information being studied.

SUBJECT AREA(S)

Social Organization in Schools: Anthropology and Education, Field Methods in Educational Research.

How schools are organized as social systems, comparison of bureaucratic and organic structures in schools, the nature and effects of sorting, territoriality and the process of making and breaking rules in schools, the process of group formation and the conflict with individualization, methods of field study applied to education, how to study the learner's own educational setting, how to develop testable hypotheses from field data, and the use and interpretation of field data.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for use by educational administrators and teachers, this program has been tested with, and can be used as training materials for, educational researchers and graduate students in the social sciences with an interest in education.

GOAL(S) OR PURPOSE(S)

The students who use these materials will be able: (1) To draw inferences from their own or somebody else's field observations, (2) to develop hypotheses about the social organization of the specific school involved as well as that of schools in general, and (3) to test these hypotheses against their own and other data.

PATTERNS OF USE

This program is a self-contained set of materials with content and exercises which are sequential and cumulative. It may be used as part of an ongoing course or as an independent program in anthropology and education, educational organization and change courses, secondary education courses, and research methods courses.

ASSESSMENT PROVISIONS

Learning is assessed by the learner and by the instructor as well. Learners take pretests and posttests and develop specific materials which can be evaluated.

TIME REQUIREMENTS

The SOHS materials require 24 hours of class sessions or individual study to complete.

IMPLEMENTATION PROCEDURES

These materials require a specialist teacher for optimal use, but can be used as self-instructional devices as well. If they are used as classroom material, there should be no more than 20-25 students in the class.

MATERIALS AND EQUIPMENT

The SOHS materials are still under development and field testing, so the final cost figures are not available. At present, materials can be made available at cost. All required materials are part of the self-contained system and can be provided for under $30 per student. Workshops will be provided at cost by the Horace Mann-Lincoln Institute, Teachers College, Columbia University.

ASSURANCES AND CLAIMS

Although the materials are transportable, there is little or no evidence that the course would be transportable (i.e., that the materials can stand alone, although they were designed to do so). On the other hand, there is no reason to assume that a similar course may not be taught successfully elsewhere.

Insofar as social bias is concerned, the materials seem to be free of any, except for those sections that deal with the actual interactions observed by the field workers. Whenever an interaction between a teacher and a student reflected social bias, it was not edited out. The developers feel that these instances of bias provide the basis for discussion of the role that social bias plays in schools.

The major claim to be made about the SOHS materials is that they provide the only materials presently available for training educators to study their own schools as social systems. Moreover, the materials are based upon actual field study of existing high schools and use actual field notes as the basis for instruction and demonstration. At all stages of development of the materials, the actual field sites were used to provide coherence, empirical testing, and validation for the materials. A formative evaluation was carried out with two classes of administrators, teachers, and social-science students, and the materials have been modified on the basis of this experience.

In addition to providing educators and researchers with learning experiences in viewing schools as social organizations, the materials teach the research skills that were used to gather and analyze the data and lead the learners to the study of their own schools. Three major principles emerge in the materials and for the learners as a result: (1) That it is possible to be rigorous and empirical in field-oriented research, which recognizes the real-world character of education, if the objectives of the research are clearly stated and if the methods for collection and analysis of qualitative data are carefully chosen and applied; (2) that change in education requires an understanding of institutional, as well as individual, behavior modification as the basis for sustained and meaningful change; and (3) that unless such programs of change and innovation are developed out of and reinform some body of theory, they inevitably fail to become institutionalized and so do not produce lasting change.

DEVELOPER/AUTHOR:

Horace Mann-Lincoln Institute
Teachers College
Columbia University
New York, N.Y. 10027
Francis A. J. Ianni, Project Director

AVAILABILITY

For information about the availability of SOHS materials and training workshops, contact:
Francis A. J. Ianni
Horace Mann-Lincoln Institute
Box 107
Teachers College
Columbia University
New York, N.Y. 10027

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 180 021

VALUES EDUCATION: APPROACHES AND MATERIALS

A paper to help social studies educators organize, comprehend, and choose values education materials appropriate to their needs

The fundamental purpose of this paper is to help social-studies educators organize, comprehend, and choose "values education" materials appropriate to their particular needs. The first chapter explains a typology of values education approaches into which the curriculum materials are classified. These approaches include inculcation, moral development, analysis, clarification, and action learning. Each approach is discussed in terms of its rationale and purpose, teaching methods and instructional model, illustrative learning activities, and exemplary programs and materials. The second chapter presents and explains an instrument for analyzing values education materials. Short narrative summaries of analyses of 13 sets of values resources are also provided. An extensive, largely annotated, bibliography of student, teacher, and theoretical background materials on values education composes the last chapter.

SUBJECT AREA(S)

Social Studies and Values Education

The paper comprises a detailed explanation of a typology of values education approaches, presentation and explanation of an analysis instrument, sample analyses of 13 sets of materials, and an extensive annotated bibliography.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are social studies teachers (K-12) and department chairpersons; supervisors/consultants, field agents; curriculum developers and decisionmakers; and teacher trainers (inservice and preservice) in a variety of subject areas.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Douglas P. Superka, Author
Patricia L. Johnson, Author
Christine Ahrens, Author

AVAILABILITY

This paper is available for $5 from:
Social Science Education Consortium
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 001

SOCIAL PSYCHOLOGY: A RESOURCE FOR ELEMENTARY AND SECONDARY EDUCATORS

A volume which describes 10 areas of educational practice for applying social-psychological resources

The author of this volume describes 10 areas of educational practice for applying social-psychological resources. Social psychology can be presented as a social science discipline in the curriculum. In addition, it can be applied to the teacher's leadership role of the classroom learning processes; to the functioning of the classroom peer group as a learning group; to staff development and leadership in the school building and school system; to the development and operation of the school building; to the development of the school community; to the development of the larger socialization community; to the recruiting, training, and utilization of the human resources needed for quality education; to future projections for educational planning; and to the utilization of social-psychological knowledge itself for improving education and coping with resistance to change. Two or three illustrations for each area of application are provided. An inventory of resources with a social-psychological focus concludes the paper.

SUBJECT AREA(S)

The subject area is social science; specifically, social psychology as an educational resource.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are curriculum planners, elementary and secondary teachers and administrators, and college methods teachers concerned with the social studies.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
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Ronald Lippitt, Author

AVAILABILITY

This document is available for $2.00, and can be ordered from:

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855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 002

AMERICAN GOVERNMENT INFORMATION UNIT (AGIU) (CURRICULUM ALTERNATIVES FOR SECONDARY SCHOOLS)

A review and comparison of nine high school social studies programs

The *American Government Information Unit* reviews and compares nine high school social studies programs:

1. Utah State University Social Studies Project (A curriculum focused on thinking reflectively about public issues);
2. High School Curriculum Center in Government Project (American political behavior course);
3. Sociological Resources for the Social Studies (Episodes in social inquiry series);
4. The Harvard Social Studies Project (AEP public issues series);
5. Holt Social Studies Curriculum (Comparative political systems course);
6. Lincoln Filene Center Secondary Social Studies Program;
7. Law in American Society Foundation (Justice in urban America series);
8. Educational Research Council Social Science Program (ERCSSP): Concepts and inquiry (The price of freedom course);
9. The Amherst Project.

Each is considered in terms of its major features: Curriculum use, length of use, content perspective, content organization, student ability level, and cost per pupil per year. Characteristics such as the following are reviewed: Grade level, sample topics, student tests, teacher training requirements, format, instructional strategy, readability level, developing agency, publisher, and availability.

The 314-page volume helps high school social studies teachers obtain decision-oriented information on the "new social studies" materials that encourage adults to challenge students with issues, ideas, and raw data. It serves as a guide to those materials that lead students to inquire, develop hypotheses, and reach their own conclusions.

SUBJECT AREA(S)

American Government (high school level).

INTENDED USERS AND BENEFICIARIES

Teachers, social studies coordinators, administrators, and trainers of secondary school social studies personnel are the intended users.

GOAL(S) OR PURPOSE(S)

To provide a comparative synthesis of curriculum developments in secondary level social studies for school personnel responsible for curriculum decisionmaking.

PATTERNS OF USE

The information unit can be used by individuals or in small groups.

IMPLEMENTATION PROCEDURES

No special equipment or facilities are needed.

ASSURANCES AND CLAIMS

The AGIU underwent preliminary, main, and combined main/operational field tests. During the combined MFT and OFT, subjects reviewed all parts of the AGIU and followed review instructions, including the requirements that they review all programs through the "summary" level and that they read at least three reports. The AGIU met all its objectives under MFT conditions. The studies were carried out in Iowa and in Southern, Eastern, and Western States. Development and field testing are reported in two ERIC documents, ED 052 114 and ED 051 065.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
American Government Information Unit	1 copy for each user	7.95	Reusable	

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

AVAILABILITY

The product carries a 1971 copyright. It is sold at $7.95 per copy. Order from:

Universal Research Systems
363 South Taaffe St.
Sunnyvale, Calif. 94086

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 003

LEARNING WITH GAMES: AN ANALYSIS OF SOCIAL STUDIES EDUCATIONAL GAMES AND SIMULATIONS

A book which describes and analyzes games and simulations suitable for children in grades K-12

Seventy social studies educational games and simulations, all of which are designed for kindergarten through 12th grade and many of which are applicable to adults, are described and analyzed in the major section of this book. Each of the analyses is divided into eight categories and provides: An overview of the game; a description of the physical qualities and cost of the materials; suggested time required to play the game; intended user characteristics; rationale and general objectives; basic concepts, generalizations, trends, themes, or simulated situations which are the basis for the content of the materials; procedural activities and responsibilities of students and teachers; and evaluative comments. Arrangement of the analysis is alphabetical by game title. Games are cross-referenced by the developer, grade level, publisher, subject area, and miscellaneous. In addition to the analyses, the book contains an extensive list of sources and resources on the development and use of educational games, including an annotated bibliography of books on simulation design and use, listings of game bibliographies and directories, various developers in the field of social studies, and several newsletters and journals dealing with simulation/games. An abbreviated games and simulation guide which includes a list of more than 250 games available in social studies education but not analyzed in the previous section of the book, is also included.

SUBJECT AREA(S)

Social studies/social sciences including simulation/games is the subject area.

This paper includes sources and resources for games and simulations—directories, bibliographies, developers, newsletters, and journals; introduction to game analyses; 70 analyses; and games/simulation guide.

INTENDED USERS AND BENEFICIARIES

The intended users are social studies teachers (K-12), curriculum decisionmakers, supervisors/consultants, and department chairpersons.

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Cheryl L. Charles, Editor
Ronald Stadsklev, Editor

AVAILABILITY

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P.O. Box 190
Arlington, Va. 22210

Learning With Games was copyrighted in 1973. It is currently available for $4.95 from:
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

BRINGING ABOUT CHANGE IN SOCIAL STUDIES EDUCATION

A publication which addresses itself to the unique problems of diffusion, adoption, and change in social studies

Despite the present availability of high-quality curriculum materials for use with the inquiry approach of the new social studies, the pace of change is slow. This paper addresses itself to the unique problems of diffusion, adoption, and change in social studies, and with the principles and practices which can be applied to solve these problems. The first four chapters attempt: (1) To analyze some of the barriers to change in education generally and in social studies education particularly, (2) to summarize some of the relevant research concerning the problems and processes of change in education and in other areas, (3) to describe various change models and roles, and (4) to outline some strategies and techniques that might be used for bringing about diffusion and adoption of the new social studies. Chapter 5 presents an overview of some of the main types of change projects that have been carried out in the new social studies, and chapter 6 describes one such project, the social studies field agent training program of Indiana University. The final chapter provides an annotated bibliography of some of the key sources on the process of change that might be of use to practitioners in the field of social studies education.

SUBJECT AREA(S)

Subject areas include social studies, diffusion, educational change and strategies, change agents, information dissemination and utilization, inquiry training, inservice teacher education, changing attitudes, and role perception.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are social studies teachers (K to adult level), educational innovators, curriculum decisionmakers, supervisors/consultants, teacher trainers (inservice and preservice), department chairpersons, and school administrators.

DEVELOPER/AUTHOR:

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Alice Jwaideh, Author
Gerald W. Marker, Author

AVAILABILITY

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P.O. Box 190
Arlington, Va. 22210

Copies are available at a cost of $6 from the developer:
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 005

COPING WITH COMMUNITY CONTROVERSY: GUIDELINES FOR INTRODUCING NEW SOCIAL STUDIES PROGRAMS

General guidelines and introduction to new social studies programs

This paper offers guidelines focusing on the issues that must be faced when controversy arises with the introduction of new social studies programs. Three basic principles, relating to the nature of the public school as an institution, give a philosophic underpinning to the guidelines: (1) People have a right to know the rationale and content of what is offered in school; (2) the school is an instrument of society, not a primary molder of society, and, therefore, is a referee of social systems, not an advocate of one; and (3) the school must insist on meeting the basic requirements of the role of reason. The 12 guidelines are divided into 3 categories: General guidelines, introducing new programs, and responding to attacks.

SUBJECT AREA(S)

Subject areas are social studies, community controversy, educational change, and role of school.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are social studies teachers (K-12), supervisors/consultants, field agents, department chairpersons, curriculum developers, and school administrators.

DEVELOPER/AUTHOR:

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Arthur W. Foshay, Author

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855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

18, 19, 20: WILL THEY VOTE?

A document containing suggestions and resources for preparing and motivating new young voters

Content, classroom suggestions, and resources for preparing and motivating new young voters are the focus of this publication. The first section of the paper contains chapters on universal suffrage (a historical and current view), whether public affairs should be entrusted to the people, the role of voting in a representative democracy, the role of political parties, and practical politics. Each of these topics is followed by some suggestions for strategies and materials to use in dealing with it. The second major portion of the publication is devoted to an annotated list of relevant resources—institutions, books, classroom materials, and games.

SUBJECT AREA(S)

Social studies/social sciences: Civics, political issues, political science, social action, and voting.

The history and present state of universal suffrage; the role of voting and political parties in a representative democracy; practical politics; and instructional resources including books, periodicals, classroom materials, and games/simulations.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are secondary and undergraduate social studies/social science teachers, social studies department chairpersons, and social studies supervisors/consultants.

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science
Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Nicholas Helburn, Author
Joanne L. Binkley, Author

AVAILABILITY

Copies are available (order stock No. 1780-01082) at a cost of $0.35. Order from:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

INFORMATION CURRENT AS OF MARCH 1975 ■

SOCIAL SCIENCE

RD 190 007

GEOGRAPHY IN ELEMENTARY AND SECONDARY EDUCATION: TRADITION TO OPPORTUNITY

A paper on the precollege teaching of the geography of the United States, from 1800 to the present

This paper on the precollege teaching of geography documents the teaching of geography in the United States from 1800 to the present and projects it into the future. Analyses of how views on physical, regional, and human geography have affected elementary and secondary curriculums and a history of the incorporation of geography into the social studies curriculum in the 1940's are included. In the 1960's, the High School Geography Project (HSGP) and various elementary level projects shaped elementary and secondary geography into an interdisciplinary and conceptually oriented subject with emphases in affective learning and urban studies. Critical elements for geography education envisioned for the future are decisionmaking, valuing, and resolving conflict. Traditional tools for locational analysis applied to these elements will validate geography's importance in the curriculum. Conceptual models for these processes and specific examples of their application—deciding whether to build the Alaska Pipeline, investigating the values behind locating a parking lot, and resolving a conflict over the location of the future settlement of Jamestown—provide direction for teaching the geography of the future. An annotated bibliography on geography and the teaching of geography is also included.

SUBJECT AREA(S)

The social studies/social sciences pertaining to geography as a tradition in education; geography in the social studies and in the future; and decisionmaking, values education, and conflict resolution in geography are the subject areas.

INTENDED USERS AND BENEFICIARIES

Elementary and secondary social studies teachers, curriculum developers and decisionmakers, and social studies supervisors/consultants are the intended users.

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George Vuicich, Author
Joseph Stoltman, Author

AVAILABILITY

This paper is available for $2.25 from:
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

GLOBAL DIMENSIONS IN THE NEW SOCIAL STUDIES

A survey which identifies a number of materials and guides that contain components useful for global education

This survey identifies materials and approaches in social studies/social science education that contain one or more components useful for global education. These components are described analytically, in a format designed to facilitate comparisons between materials. The intention of the authors is to provide a handy, practical tool for teachers and curriculum supervisors. It can help them in their selection of new materials which in turn can be integrated with the existing curriculum in order to help students better understand the realities of the global dimensions of their lives. Fourteen projects are analyzed and indexed by subject, director, source, publisher, and grade level. Twenty-two simulation/games and eight global education projects and organizations are annotated. The introduction to the survey and a final bibliography give an overview of global (international) education as a part of high school curriculums from the early 1960's to the present.

SUBJECT AREA(S)

Social studies/social science including global and international studies, political science, world affairs, and foreign relations are the subject areas.

This document gives purpose, design, and summary of survey; terminology related to teaching strategies, subfields, and substantive issues of international studies; analyses of 14 national social studies projects; and annotated lists of simulation/games, centers, projects, and organizations.

INTENDED USERS AND BENEFICIARIES

The intended users are secondary social studies teachers, department chairpersons, supervisors/consultants, and curriculum decisionmakers.

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Committee on Pre-Collegiate Education
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John H. Spurgin, Author
Gary R. Smith, Author

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INFORMATION CURRENT AS OF MARCH 1975 ■

1335

RD 190 009

GUIDELINES FOR USING A SOCIAL SIMULATION/GAME

Suggestions which provide analytical and critical information on the use of simulation/games in social studies classrooms

Designed to help teachers maximize outcomes when using any social simulation/game, these guidelines are one part of a project which attempts to provide analytical and critical information on the use of simulation/games in social studies classrooms. The general approach of the guidelines is applicable to any of the simulation-type activities now used in classrooms, although the orientation is specifically designed for simulation/games. The first part outlines the general teaching/learning approach, or philosophy, that underlies social simulation/games. The second part is a practical guide to preparing for and conducting social simulation/games. Steps outlined are preliminary planning and preparations, game startup, game play, debriefing, and teacher's postgame tasks. Sample pages of the survey version used in classrooms to provide feedback for the revised guidelines are reproduced. Two other publications developed by this project are *Simulation/Games in Social Studies: What Do We Know?* and *Simulation/Games in Social Studies: A Report.*

SUBJECT AREA(S)

Social studies: Simulation/games.

This product presents underlying philosophy for games and detailed guidelines—their development, recommendations for use, teaching/learning approach, and some specific steps for using simulation/games (preliminary planning and preparation, game startup and play, debriefing, and postgame tasks).

INTENDED USERS AND BENEFICIARIES

The intended users of this product are social studies teachers (K-12), supervisors/consultants, teacher trainers (inservice and preservice), and department chairpersons.

DEVELOPER/AUTHOR:

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INFORMATION CURRENT AS OF MARCH 1975 ■

PREPARING TO TEACH POLITICAL SCIENCE: SOURCES AND APPROACHES

A monograph listing resources and instructional methods for secondary teachers of political science

This 29-page monograph presents resources for secondary teachers of civics, government, problems of democracy, comparative political systems, and international relations. Resources are listed under categories that represent three different approaches to the study of political phenomena. A section also provides general resources for teachers who would like to read more about the discipline of political science—its scope, boundaries, and methodology—and about specific approaches. In addition, the paper gives practical instructions for obtaining and using the resources to improve classroom instruction in political science.

SUBJECT AREA(S)

Social studies/social science: Political science, civics, government, problems of democracy; comparative political systems, and international relations.

Subject areas include definitions of "politics," approaches to the study of political phenomena and curriculum materials reflecting such approaches, ways to change and improve existing course structures, and general resources on political science for secondary teachers.

INTENDED USERS AND BENEFICIARIES

This paper specifically addresses teachers of civics, government, problems of democracy, comparative political systems, and international relations in secondary schools.

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855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 011

PROFILES OF PROMISE (POPS)

A set of descriptive brochures that highlight innovative social studies program and practices

Profiles of Promise (POP's) are descriptive brochures that highlight innovative social studies and social education practices which teachers can easily adapt to their own classrooms or schools. Each of the 45 brochures contains a description of a program and information about its objectives, planning, personnel, communications, and evaluation.

The titles of the 45 *Profiles* are as follows:

1. Toward the Human Element: Creating a Democratic Environment
2. Social Studies Lab: Enfield's Exciting Alternative
3. III Annual Dade County Social Studies Fair
4. Cross-Age Teaching in the Social Studies
5. The New City School
6. The Dig: A Study in Archaeology
7. Integrated Social Studies
8. Community Laboratory in Political Science
9. Interim: Not a Time for Rest
10. Finding Relevance in Your Own Backyard: A Course in Local History
11. Project Pride: Probe, Research, Inquire, Discover, Evaluate
12. The Proper Study of Man
13. Innovative Social Studies in Urban Elementary Schools
14. The Sharing of Knowledge and Concerns: The Advisory and Learning Exchange
15. Children and the Law
16. A Bilingual Navajo Curriculum Project
17. An Exercise in Realism: Contemporary Family Life
18. A Student-Centered Approach to Social Studies
19. Cooperative Group Process
20. Studies in the Environment: Redesigning the Community
21. Society Environment Science
22. A Cultural Approach to the Teaching of Social Studies
23. Caring is Basic at James Madison School
24. Boulder Experiments
25. A Total Immersion Day
26. Solving a Community Problem: Computer Car Pooling
27. Individualized Elective Program
28. Careers in Social Science
29. Crazy Shapes and Cool Impressions: A Corporation
30. A Human Rights Curriculum
31. Downtown Learning Center
32. Out of the Classroom—Into the Field
33. Poss/Haspeg: Exploring the Social Studies
34. The Studies of Urban Studies: A School Within a School
35. Death and Dying—A Living Study
36. Mini-Versity: A New Approach to Continuing Teacher Education
37. Learning for Living: Adolescents in Preschool
38. Bringing China to the Classroom
39. High School in the Community: Providing Alternatives in Education
40. Newspaper in the Classroom
41. American History and English Developmental Program
42. Women's Studies in the Junior High School
43. Adapting a Curriculum Project
44. Man Between War and Peace: An Interdisciplinary International Studies Course
45. Bringing the John F. Kennedy Library into the Classroom

SUBJECT AREA(S)

The subject area is social studies; specifically, innovative educational practices for elementary and secondary classrooms.

INTENDED USERS AND BENEFICIARIES

The intended users of these brochures are elementary and secondary classroom social studies teachers, school administrators, and university methods teachers.

DEVELOPER/AUTHOR:

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Frances Haley, Editor
Sharryl Hawke, Editor

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Social Science Education Consortium
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

SOCIAL SCIENCE

RD 190 012

TEACHING AMERICAN HISTORY: SOURCES AND APPROACHES

A paper to help social studies teachers redesign American history courses to incorporate new teaching processes and approaches

The purpose of this forthcoming paper will be to give social studies teachers tips on how to redesign American history courses to incorporate new teaching processes and content approaches. The paper will be particularly directed toward those teachers who have previously taught American history in a chronological mode and who wish to develop a new approach. The first section will contain an introduction to the purpose of studying history in the 1970's and a general examination of the latest processes, inquiry modes, and teaching strategies used to improve the teaching of history. The second section will examine specific approaches for teaching history that show promise for the future. These approaches are presented in the form of minilessons which the teacher may use in the classroom. These new approaches include: Innovative approaches to traditional content, American slavery; social history of the working class people during the process of American industrialization; comparative history of the American Revolution and other wars for independence; local history; and American studies/humanities interdisciplinary approach to the study of the American Indian.

SUBJECT AREA(S)

The subject areas are American history, social sciences, and humanities.

INTENDED USERS AND BENEFICIARIES

The intended users will be social studies teachers of grades 7 through 12 and social studies department chairpersons, supervisors, consultants, and teacher trainers.

DEVELOPER/AUTHOR:

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Glenn Linden, Author
Don English, Author

AVAILABILITY

Cost of this paper is undetermined at this time. The paper will be available November 1975 from:
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855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

TEACHING PSYCHOLOGY IN SECONDARY SCHOOLS

A paper which examines the history and growth of precollege psychology

This document examines the teaching of psychology at levels below the college level. Its purpose is to establish a separate identity for high school psychology teachers by tracing the growth and documenting the breadth of present-day psychology at the secondary school level. The focus is on distinguishing between the needs of the college professor and the high school psychology teacher. Discussion is limited primarily to high school psychology courses, where most curriculum development efforts and enrollment increases have occurred. A few efforts at the elementary and junior high school levels are also mentioned. A brief history of the field and documentation of the rapid growth in recent years are reviewed. In addition, some of the philosophical issues behind the teaching of psychology below college are considered. The main issue of contention is whether personal development or substantive knowledge of psychology as a discipline should be the primary goal. The last two sections are devoted to instructional approaches and teacher training, the primary areas in which the philosophical issues have had an impact.

SUBJECT AREA(S)

Social studies/social sciences: Psychology and high school curriculum.

Subject areas include history of the teaching and growth of precollege psychology, philosophies underlying high school psychology courses, psychology curriculum materials, and teacher training and certification.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are secondary social studies teachers, curriculum developers, and teacher trainers (preservice and inservice).

DEVELOPER/AUTHOR:

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 014

TIPS FOR TEACHING ABOUT THE BICENTENNIAL IN THE SOCIAL STUDIES

A paper which suggests some creative classroom approaches and materials easily implemented by social studies teachers

The purpose of this paper will be to suggest some creative classroom approaches and materials that can be easily implemented by social studies teachers. It will suggest ways of thinking about the meaning of the Bicentennial; topics, concepts, and issues that are especially relevant in light of the Bicentennial celebrations; and instructional strategies and resources for dealing with these topics, concepts, and issues. Five specific lessons will be developed which will encourage inquiry and values clarification related to five major concepts: Dedication, humor, frontier, loyalty, and protest. The hope is that teachers will be able to use this paper to make the Bicentennial more than a series of ribbon cuttings and parades.

SUBJECT AREA(S)

The subject areas are the Bicentennial and social studies.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper will be social studies teachers of grades kindergarten through 12 and social studies department chairpersons, supervisors, consultants, and teacher trainers (primarily inservice).

DEVELOPER/AUTHOR:

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Allan Kownslar, Author

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

TIPS FOR TEACHING ABOUT ETHNIC HERITAGE IN PRE-COLLEGE SOCIAL STUDIES

A paper to aid precollege teachers who are teaching or plan to teach ethnic studies

The focus of this paper will be to aid precollege teachers who are presently teaching ethnic studies, and those who are planning to teach ethnic studies for the first time. In the prospectus, the author discusses what is meant by ethnic studies, where ethnic heritage studies education occurs, the goals of ethnic heritage studies education, demarginalization of ethnic studies, and suggested multiethnic studies and strategies for teaching ethnic studies. Also included will be annotated bibliographies of ethnic heritage materials appropriate for use in K-12 classes. The paper will provide teachers with a general overview of ethnic studies in a total school curriculum as well as specific teaching strategies for a variety of classroom settings. The author plans to emphasize ethnic studies as "education for understanding, not division."

SUBJECT AREA(S)

Subject areas include ethnic studies, humanistic education, and teaching strategies.

INTENDED USERS AND BENEFICIARIES

The intended users are the teachers of social studies, language arts, music, art, and humanities in K-12 classes.

DEVELOPER/AUTHOR:

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Carlos E. Cortes, Author

AVAILABILITY

The document will be available November 1975. At that time, the cost is to be determined. It can be ordered from:

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855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 190 016

TIPS FOR TEACHING PRE-COLLEGE SOCIOLOGY

A document which provides teachers of grades 7-12 with suggestions for teaching sociology

This document will present the teacher of 7th- to 12th-grade social studies classes with suggestions for teaching sociology. It will especially focus on giving aid to social studies teachers who have not taught sociological material in their classrooms before and would like to incorporate such material into their regular social studies courses or develop a course focusing exclusively on sociology. The author will make a selective compilation of appropriate resources, develop suggestions for incorporating these resources into lesson plans, suggest appropriate teaching strategies, and offer some thoughts about how to organize and conceptualize sociological-oriented content.

SUBJECT AREA(S)

The subject areas are social studies and sociology.

INTENDED USERS AND BENEFICIARIES

The intended users of this document will be social studies teachers of grades 7 through 12 and social studies department chairpersons, supervisors, consultants, and teacher trainers.

DEVELOPER/AUTHOR:

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C. Frederick Risinger, Author

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

TRENDS AND RESOURCES IN PRE-COLLEGE TEACHING OF ANTHROPOLOGY

A paper which traces the growth in the importance of anthropology from the Second World War to the present time

This paper discusses the trends and resources in the teaching of anthropology at the elementary and secondary levels of education. The author traces the growth in the importance of anthropology as a part of the school curriculum from the Second World War to the present. The paper also discusses the reasons for including anthropology in the curriculum and outlines the content and structure of the field. In addition, it describes a variety of curriculum materials for teaching anthropology at the precollegiate level. Further, the paper lists a number of procedural hints and resource suggestions to help in the construction of anthropology courses and units. Two appendixes follow the main body of the paper. The first contains short essays by the directors of three of the anthropology curriculum materials development project. The second appendix deals with anthropology and an approach to the study of educational institutions. Finally, a selective annotated bibliography of resources for teachers of precollegiate anthropology is included in the volume.

SUBJECT AREA(S)

The subject areas are social science, social studies, and anthropology in education.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are curriculum planners, elementary and secondary teachers and administrators, and college methods teachers concerned with the social studies.

DEVELOPER/AUTHOR:

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INFORMATION CURRENT AS OF MARCH 1975 ■

TEACHER EDUCATION

1346

OVERVIEW

KENNETH HOWEY
University of Minnesota
Minneapolis, Minnesota

The state of the art

The most salient condition of this final quarter of the twentieth century may well be the rapidity with which change occurs. The burden and stress placed upon the schools have never been greater and, correspondingly, the preparation and renewal of teachers are increasingly difficult tasks. Before specific trends within teacher education are reviewed, three recent changes in the larger society are briefly noted for their current impact on the state of teacher education.

First, the rate of population growth has slowed at an unprecedented rate. For the first time in the Nation's history, a new condition exists for those in the colleges and universities primarily responsible for teacher education. There is no longer a need to turn out large numbers of beginning teachers. Rather, there is more opportunity to explore seriously the new teacher roles and to further investigate the different program formats needed to train teachers cost effectively. The reduced and more stable force of teachers in service also provides an opportunity for a more systematic attempt to conceptualize and operationalize inservice training. Teacher educators, especially those in higher education, must critically examine what role they can effectively play in continuing education a process even more complex than initial training.

Second, the increased and diverse spectrum of information and experience available to more and more people within our society has resulted in a greater acceleration of diverse lifestyles and value systems. Therefore, expectations with respect to the purposes of the schools and responsibilities of the teachers differ not only between communities but within them as well. The degree to which teachers can continue to be prepared for both generalized and standardized needs of their students is questionable. Certainly, the demands require a more serious exploration of a number of distinctively different teacher models again, a process even more complex than traditional training practices.

Third, teachers are now collectively in a better position to determine policy and direction in teacher education. At this time the teachers in the United States constitute a genuine political force. In one State, for example, the direct campaign contributions of the teachers' organizations for State legislators was more than double the total given by all business, trade, and professional organizations combined. The influence of teachers on the function and roles of policymakers in State, intermediate, and local units, as well as teacher-trainers in both colleges and school systems, could promote more dramatic change due to the teachers themselves. New governance structures and delivery systems reflecting more collaborative intersystem effort are rapidly evolving—again, a process which complicates traditional practice in teacher education.

Dr. Kenneth Howey is on a sabbatical from the University of Minnesota, Minneapolis, Minnesota, where he is a member of the School of Education faculty. He is currently engaged in research on continuing education for teachers.

Preservice education trends

While the overriding concern in teacher education today is for more effective response to the needs and conditions of teachers in service, changes in teacher education are more evident in preservice programs. This trend is understandable since the legal, fiscal, and conceptual parameters of preservice teacher preparation are currently more explicit than the corresponding dimensions of inservice teacher education. Most major renewal efforts such as competency-based education have also focused upon preservice teacher training. Recent changes in curricular, instructional, and organizational formats at the preservice level are reviewed first.

Curricular trends.—The number of curricular modifications in teacher preparation is hardly surprising. The curricular concern in the early and mid-1960's that teachers have a better grasp of the traditional disciplines through greater integration with the colleges of arts and sciences has waned in the face of multiple new demands. The social activism of the late 1960's resulted in increased emphasis on understanding ethnic and cultural differences. Human relations training, stressing greater intrapersonal awareness and more effective interpersonal relations, has, in fact, been legislated in many States as part of the teacher education curriculum. Continuing concern in the 1970's about institutional racism, role stereotyping, and sexism has further contributed to this humanistic curriculum.

Concurrently, there have been broadened concern and increased study of the social, emotional, and even moral dimensions of child and adolescent development. The research and developmental work undertaken in the area by Kohlberg, Simon, Combs, and Rogers, combined with the considerable advances in cognitive-oriented domains made by Piaget, Hunt, Gagne, and Guilford, has considerably expanded our thinking about learners and learning. Not only has research on learning contributed to modification of the teacher education curriculum, but the studies on teaching have also generated data to contribute to this extension. The recent National Conference on Studies in Teaching, a major undertaking sponsored by NIE, helped synthesize research and development in such diverse areas of teaching as human interaction, behavioral analysis, skill performance, linguistic processes, and clinical information processing. This analytic study of teaching and laboratory components which facilitate the development of both content-free and context-specific teaching skills is now a common component of teacher education curriculums.

Although it would be naive to assume that teacher education has adequately incorporated modern technology into its curriculum, advances have also been made in this area. All programs include some work in terms of lighter hardware, such as television, video tape, and film; and several programs include components which address the multiple uses of computers and more sophisticated multimedia processes, such as dial access.

Since schooling is increasingly acknowledged as a political process, the multiple implications for teachers have further extended the curriculum beyond more traditional academic concerns. The role of the teacher, considered in a broader and more political professional context, reinforces the curricular concerns about the teacher's responsibility to the larger community and the educator's ability to cope with and effect change.

Finally, the articulation of more specified differences in curricular objectives and school organization, which in turn requires different teacher attributes and teaching roles, overlays each of these earlier training components. Variations in instruction, such as open classrooms, individually guided motivation or individually programmed instruction formats, and team-teaching arrangements are viewed in terms of their implications for each area of study. In many instances, interrelated training components are designed to accommodate specialization in a variety of instructional settings.

Instructional trends. The major impact of the competency-based movement has been to alter instructional practice and organizational procedures within teacher education. At this time it has effected more experience-based, if not competency-oriented, programs. The better integration of study and practice may well be the most noticeable trend in preservice teacher education. From the outset of the program, the trainee has opportunities to practice focused-teaching tasks. Recent research on the effects of feedback (who provides the best feedback, in what manner, in what amounts, and at what times) has led to more systematic and comprehensive data collection and feedback schemes. These more sophisticated feedback systems are a necessary corollary to the expanded opportunities to practice teaching.

Instructional advances are not limited to improved teaching opportunities in laboratory and clinical settings. More flexible instructional formats at the university level include modular instruction which has led to considerable diversification beyond the traditional lecture-discussion format. In this scheme the trainee is not only given more options in terms of how he or she can attain stated objectives, but is also provided with more flexible time frames in which to do it. The trainee's demonstration of attaining the desired objective, rather than arbitrary due dates, determines when requirements are satisfied.

Organizational trends. This more fluid and varied instruction has required a degree of faculty collaboration and organizational sophistication not necessary in more traditional programs. The management and organization of such programs have made new demands in terms of the storage and retrieval of materials, recordkeeping, and collaboration with the practicing professionals in arranging a variety of short-term and focused practice opportunities. There is a genuine need, then, for training materials which assist the teacher educator in meeting the challenges of educating for the year 2000.

While many innovative trends can be noted in preservice education, it would be erroneous to suggest that educators have boldly moved out with dramatic new programs. A desired outcome of several forces contributing to new directions in teacher education over the last 15 years has hardly been achieved. Various curricular and instructional modifications still tend to be developed in isolation from other programs. Coordinated and comprehensive program development both within and between institutions is still rare. Program changes are largely squeezed and shoved into the limited teacher education "professional sequence," a component which usually comprises only a portion of the final 2 years of baccalaureate study. Nonetheless, given shrinking monetary and personnel resources, much has been accomplished. The fact that this *Catalog* contains multiple products reflecting each of the newer directions noted here underscores this point.

Inservice education trends

Inservice teacher education mirrors most of the curricular modifications outlined above; therefore, those trends need not be reiterated. At this time in teacher education, the effective integration of teacher renewal activities and the ongoing responsibilities of teaching occupy center stage. A backdrop of legal-political and fiscal questions enshrouds this major problem. The development of a variety of consortia arrangements, teacher centers, renewal structures, and collaboratively operated training complexes is evidence of high concern for continuing teacher education. A critical need now is for viable guidelines for intersystem collaboration and decisionmaking.

NIE products for teacher educator needs

As indicated above, the knowledge base and resultant products and materials available to the teacher-educator today are considerable contrasted to those of a generation ago. The essence of the teaching role is defined by the myriad daily interactions that teachers have with their students. The teacher-educator today has a variety of tools and techniques to assist the prospective or practicing teacher in better understanding teaching behaviors.

Patterns of both verbal and nonverbal behavior and cognitive and social interactions can systematically be isolated and recorded for study. NIE-sponsored products such as *Interaction Analysis*, *Interaction Analysis: A Minicourse*, and *Systematic and Objective Analysis of Instruction* are but a few examples which reflect the substantial research and development to produce training materials for teachers.

Increased sophistication in understanding teacher-learning transaction is paralleled by the contributions of research and development in feedback and self-confrontation as reflected in the products *Training Materials for the Personal Assessment Feedback System* and *Training Materials for the Personalized Videotape Feedback System*.

There are a variety of techniques by which today's teachers can acquire feedback not only about their teaching behaviors, but also about their more general developmental needs and phenomenological orientation. The counselors have been integrated into many teacher education programs in a proactive feedback role. They are trained to assist both the student and teacher-trainer in planning instructional activity appropriate to each student's unique development pattern.

Protocol materials have also been developed which allow the teacher-educator to illustrate more vividly and to model concepts (e.g., *Protocol Materials: Training Materials for Uniting Theory and Practice*). Minicourses, (*Minicourse 1: Effective Questioning* and *Minicourse 15: Organizing Independent Learning*), allow the prospective or practicing teacher, in a self-contained and independent format, to acquire a wide range of specific teaching skills and strategies. Concise reviews of the literature, multiple opportunities to observe and analyze examples of desired skills, and focused practice with opportunity for feedback and analysis of the trainee's development are all interrelated in this new instructional format. In addition, a variety of microteaching (e.g., *Microteaching: Selected Papers*), role playing (e.g., *Minicourse 10: Role Playing in the Classroom*), and simulated techniques (e.g., *Simulation as an Instructional Alternative in Teacher Education*) allow the teacher-educator to work with trainees in more flexible, yet developmental and sequential, training formats.

This capability to better focus on specific teaching skills is part of a developmental process and not a fragmented and mechanized orientation toward teaching. Considerable research and development have been directed toward the organizational and instructional skill needed for teachers to provide more individualized learning opportunities within the classroom. Training materials which assist in creating a more flexible and responsible physical environment, organizing individualized and independent instruction (e.g. *Minicourse 8: Organizing Independent Learning: Primary Level*), utilizing proven principles in designing curriculum (e.g., *The Use of Learning Principles in Instruction*), implementing cross-age instructional formats (e.g., *Cross Age Peer Help*), and selecting computer instructional materials (e.g., *Selecting Computer Instructional Materials*) are among those which contribute to a more flexible, instructional environment. Research findings on the social dynamics of the classroom have resulted in specific strategies for getting students into more collaborative and less competitive structures (e.g., *Team-Games-Tournament: Instructional Process Curricular Units*). Strategies for responding effectively to counter-productive behavior are suggested in the *Classroom and Instructional Management Program*.

Recent research and development have not only allowed the teacher-educator to assist the teacher in designing more responsible instructional settings, they have also helped organize training programs in a similar vein. Products such as *A Guide to a Model for the Preparation of Elementary School Teachers* and *A Guide to the Teacher Innovator* are but a few that address the multiple problems encountered in designing and implementing more flexible, yet interrelated, teacher education programs. The teacher-educator also has more data on those programs designed to prepare specific types of teachers, such as teachers for urban settings (e.g., *Beginning Teachers in the Inner City*), the teacher as clinical practitioner (e.g., *A Guide to Behavioral Science Elementary Teacher Education Programs*), humanist (e.g., *A Guide to Model Training for the Individualization of Instruction*), in addition to institution builder and innovator. Changing teacher education programs calls for changes in the role of the teacher-educator. Training materials for ongoing teacher training are also available (e.g., *Interdisciplinary Faculty Teaming: A Workshop*).

Research has also resulted in products which can assist the teacher-educator in the increasing number of legal, political, and fiscal problems encountered in preparing teachers for productive careers. Products addressing current thinking on such issues as governance (e.g., *The Governance of Teacher Education*), accreditation (e.g., *Accreditation Problems and the Promise of PBTE*) in addition to shrinking enrollments and revenue, and school/college relations are now available. The growing concern about how more effective inservice education can be effected is also reflected in the *Catalog*. Other information about teacher centers, field-based instruction, beginning or transitional inservice teaching, performance-based certification of school personnel, as well as other topics within inservice training is available.

Future directions

As impressive as much of the recent research and development has been, there is obviously still much to be done. The better identification and validation of those teacher attributes and competencies effective for different types of teaching responsibilities in different school and curricular contexts represent critical needs and a complex challenge. However, knowing what is necessary for effective teaching is merely a prelude to determining how these different types of teachers can be trained cost effectively. Also, the areas of recruitment and selection of teachers, not to mention their placement and the legal dimensions involved in this process, remain open to further investigation. The selection and sequencing of training modalities and instructional formats appropriate to continuing educational schemes suggest multiple direction for further research in teacher training. Questions of effective intervention and feedback, especially in the inservice setting, demand additional investigations if school-based, ongoing teacher renewal is to become more of a reality. These are but a few of the many current educational concerns. A host of promising contexts must be further developed to provide teacher education with the empirical base it needs.

CLASSROOM AND INSTRUCTIONAL MANAGEMENT (CLAIM) PROGRAM

Inservice teacher training program to assist teachers in reducing the frequency of behavior problems and increase the quality of academic work

Classroom and Instructional Management (CLAIM) is an inservice training program designed to help teachers acquire skills that will help them reduce the frequency of behavior problems and increase the amount and quality of academic work done by students. The program is divided into 8 topical units which can be taught over 6, 10, or 14 group sessions. The materials consist of a participant's book for each member of the course, a coordinator's book, and four filmstrips and cassette tapes. Each unit in the participant's book contains several paper-and-pencil exercises to check the reader's comprehension. In addition, each unit includes several practice exercises to be completed in a classroom situation. The topics covered by the training course are: An introduction to behavior analysis, the influences on using behavior, describing behavior and measuring results, social reinforcers, the token economy, contingency contracts, response weakening, peer tutoring, and scheduling.

The program is based on the findings of behavior analysis. It emphasizes that teachers can change classroom behavior without having to change the entire life situations of students. By changing their own behavior and emphasizing positive classroom interactions, teachers can make the classroom a more pleasant and rewarding place.

The program was tested at 15 sites in Missouri and Tennessee. Over 100 teachers and administrators received the CLAIM training, thus exposing over 1,000 students to the approach.

SUBJECT AREA(S)

Inservice teacher training course: Behavior management techniques.

Teachers of preschool and elementary children learn how to change the behavior of students in order to bring about important learning outcomes; teachers learn to change their own behavior and to observe and describe the behaviors of students; teachers learn how to operate a token economy, how to select reinforcers, how to write contingency contracts, and how to use social reinforcers to make the classroom a more pleasant and rewarding place.

INTENDED USERS AND BENEFICIARIES

CLAIM is primarily aimed at teachers and administrators of preschool and early elementary schoolchildren. It is equally applicable, however, to day-care teachers and, with minor modifications, to older elementary, junior high, and high school teachers. The eventual beneficiaries of the course are children whose teachers learn the techniques and apply them in their classroom.

Since the program focuses on what has been called the "number one problem in education," i.e., discipline, CLAIM could have a profound impact on the progress and achievement of students in all classrooms which adopt the approach.

GOAL(S) OR PURPOSE(S)

The major goals are: (1) To describe in simple-to-follow units practical techniques teachers can use to reduce the frequency of disruptive behaviors in the classroom, (2) to suggest methods that will increase positive classroom interactions and enthusiasm and motivation for academic work, and (3) to encourage teachers to make the classroom a more pleasant and productive place for students and teachers.

PATTERNS OF USE

CLAIM can be read and implemented by teachers on their own, or a group of teachers can go through the course together with a leader or coordinator. CLAIM is usually used as an inservice training course lasting 8-14 weeks. However, it could easily be adapted for use in college methods courses.

ASSESSMENT PROVISIONS

Each unit in the participant's book contains self-check exercises to assess the reader's comprehension. Answers are provided with the exercises so that the participant can get immediate feedback on progress. Practical exercises to be carried out in classroom situations are also given. These exercises have less prescribed criteria for success. It is expected that the participants involved in the course will want some practical experience with the methods they are learning, and the course encourages them to meet with each other to discuss their questions, successes, and problems. The coordinator's book provides suggestions on how to organize the group sessions. No formal assessment or testing of participants is carried out as part of the course. The coordinator's role is less for quality control and more as a general discussion leader and organizer of the course.

TIME REQUIREMENTS

The CLAIM training course may be implemented in 6, 10, or 14 group sessions spread over 8-14 weeks. Each group session lasts from 45-60 minutes. Prior to each session, teachers read the appropriate unit, do the self-check exercises, and complete those practice exercises that will be discussed in the group session. The average reading time per week is 1 to 1-1/2 hours. The time for completing the practice exercises varies from 15 minutes to 1 hour or more, carried out in the classroom over several days. The total training time for the course is, therefore, approximately 40 hours, counting time spent in regular classrooms performing the practice exercises.

IMPLEMENTATION PROCEDURES

CLAIM is most effectively implemented by having a coordinator or group leader responsible for organizing the group sessions. The coordinator sets up the schedule, reads the materials in advance of other participants in the course, and is available to help and advise teachers about practice exercises. The coordinator will also arrange to show the four filmstrips and will conduct discussions of the topics in the various units. The coordinator needs no special training. The coordinator's book provides adequate instructions for how to organize and conduct the course.

Personnel Required for Product Adoption and Implementation

It is suggested that a part-time coordinator (e.g., a counselor, principal, or members of the special services staff) be used to organize group sessions and serve as a consultant to teachers when a group of people decide to take the CLAIM training at one time.

ASSURANCES AND CLAIMS

Assurances

The CLAIM program was evaluated with 43 teachers from schools in St. Louis County, Missouri, in 1973-74. The developers have not received any reports of harm associated with the use of this product. In fact, teachers' enthusiasm has been high. The materials were reviewed for any form of social bias, racial or ethnic stereotyping, or inappropriateness of content, and any problems-caused revisions of the materials. Particular attention was paid to the examples in the participant's book and to the choice of visuals in the filmstrips. The developer has tried to present a balance of racial types, men and women, and boys and girls in these examples. It should be noted that, although examples using male teachers are often used in the program materials, it seemed appropriate to refer to "the teacher" in the written materials with the pronoun "she." This is because most teachers of preschool and early elementary children are women. The coordinator is referred as "he" or "she," because the developers anticipate that this job would be held equally by either sex.

Information gathered from the field test indicates that the materials are effective in helping teachers learn new skills. During the field test, training sessions were conducted by onsite coordinators trained briefly at CEMREL, Inc. Also, the program developer and evaluation specialist attended all sessions in all schools acting as consultants to the experimental groups; therefore, the question of whether the materials can be implemented fully by an untrained local coordinator has not yet been answered. However, the materials were revised, based on the developer's experiences in the field test sites, to make them more self-implementing; and they now appear to be able to stand alone with no aid beyond that given in the program materials.

Since the CLAIM program deals with behavior analysis and behavior modification techniques, it may encounter negative user or community reactions from some audiences. The coordinator's book and sections of the teacher's guide provide some suggestions for how to deal with these issues. It should be noted, however, that the primary emphasis of CLAIM is that teachers should change their behavior in order to bring about positive changes in children. CLAIM is not mechanistic and demeaning to children; it aims at helping children respond to school in the most positive and productive way: With enthusiasm, curiosity, and joy about the learning process. The developers feel that the tone and presentation of materials in the course will allay the fears of any who believe that a program based on behavior modification might cause potential harm.

Claims

Evaluation of 43 teachers from schools in St. Louis County, Missouri, in 1973-74 showed that the CLAIM training had a significant impact on teachers' behavior, with a resulting decrease in undesirable behavior among students.

The results showed a positive correlation between CLAIM training and understanding of behavior analysis concepts, strategies, and recordkeeping procedures; mean frequency of approval statements in classrooms; and use of observation-feedback data to improve performance. In addition, the pilot teachers were overwhelmingly enthusiastic about the course. In every case, undesirable student behaviors diminished and desirable behaviors increased after CLAIM techniques were applied.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Kit of CLAIM materials:		190.00*		
Participant's books	9		Consumable with each course	
Coordinator's book	1		Reusable	
Filmstrips	4		Reusable	
Cassette tapes	4		Reusable	

*Price is subject to change

DEVELOPER/AUTHOR:

CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory)
3120 59th St.
St. Louis, Mo. 63139

David R. Buckholdt, Project Director

AVAILABILITY

The CLAIM materials carry a 1975 copyright. Copyright is claimed until 1985. The program is available from the distributor:

Walker Educational Book Corporation
720 Fifth Ave.
New York, N.Y. 10019

CLAIM
CLASSROOM & INSTRUCTIONAL MANAGEMENT PROGRAM

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 002

COOPERATIVE URBAN TEACHER EDUCATION (CUTE) PROGRAM

Preservice teacher education program to prepare teachers for inner-city schools

The *Cooperative Urban Teacher Education* (CUTE) *Program* is a nationally recognized preservice teacher education program designed to effectively prepare teachers for inner-city schools. CUTE is an intense 16-week training program conducted during the semester in which the college student is enrolled for student teaching. The objectives of the *CUTE Program* are to prepare teachers to understand their own and their pupils' environment, culture, attitudes, insecurities, anxieties, and prejudices. In addition, teachers are prepared to understand and possess competency in inquiry teaching methods.

The unique features of the CUTE model are that it is field based and interdisciplinary in approach. The first 8 weeks of CUTE consist of observations in schools, field experiences in the community, and seminars in three substantive areas: teacher education, sociology, and mental health. During the last 8 weeks of the program, the student carries out normal student teaching, but in a school located in a low-income area of the city.

Through the sociology component, students are required to participate in many field experiences in the inner-city community in which they will be teaching. Doing volunteer work with community agencies, tutoring pupils in their homes, observing for 4 hours in the waiting room of a hospital in the community, or doing a sociological case study of an individual pupil throughout the semester are examples of sociological activities in which CUTE students might participate. A vital part of the program is the "live-in"—an arrangement in which each student spends an entire weekend with a family in the community—perhaps the greatest learning experience for participating students. In this way, members of the community are actively involved in the operation of the program.

In the mental health component of CUTE, discussion sessions are guided by a psychologist or psychiatrist who encourages the student teachers to delve into their anxieties, prejudices, attitudes, and defense mechanisms. Children's emotional and psychological development are studied and discussed. Gradually, the CUTE students become more open and honest with themselves and with others; they become more secure, emotionally mature, and self-confident with the pressures they will face in everyday problems with students.

Finally, in the teacher education component of the CUTE program, emphasis is placed on inquiry teaching methods. The inquiry approach to learning strives to reduce the authoritarian role of the teacher and encourages pupil participation. CUTE students are taught to encourage their pupils to ask questions, to suggest alternatives, and to explore possible solutions to problems.

SUBJECT AREA(S)

Subject areas include:

Teacher Education—Focus and function of a teacher, teaching-learning process, analytical study of teaching, developing teaching plans, stimulating pupil responsibility, responding to pupils, individualized instruction, reaching tentative conclusions in the classroom.

Sociology—Sociological concepts pertinent to the inner city; processes of urban growth and their effects on social groups; identification of institutions, organizations, and size and location of different ethnic groups in the inner city; urban school organization; sociocultural aspects of the inner city; relationship between teaching strategies and sociocultural aspects of the inner-city; deviant behavior—causes of delinquency and methods of coping with them.

Mental Health—Determinants of behavior; mental processes in learning; internal motivations of behavior: sexual and aggressive drives, sexual drives and education, and defense mechanisms; striving for autonomy; external influences on behavior; the case study; exercises in self-awareness and group awareness; free-floating group discussions on current problems of the participating student teachers; personal and racial differences; problems developing from interaction between student teachers and the inner-city school and community.

INTENDED USERS AND BENEFICIARIES

Users include teacher education institutions and their staffs. These would include faculty members in schools of education at universities or colleges, and staff members in urban education centers affiliated with school districts. The program is intended to be used in training college seniors majoring in education during, or just prior to, the semester in which they do their student teaching. Student enrollment in the program is on a voluntary basis; interest in teaching in the inner-city is the only requirement.

The CUTE *Program* allows for flexibility and adaptability in teacher training. With modifications in the content area of the sociology component, the program can be modified to train student teachers interested in teaching in any part of the city or in rural areas, as opposed to just the inner city. Certain substantive areas of the program could be investigated in more depth for courses during the junior year of the student's academic program. Also, parts of the program could be adapted to inservice training programs for teachers, rather than the present preservice format.

Ultimate beneficiaries of the program are the inner-city schools and their pupils.

GOAL(S) OR PURPOSE(S)

The objectives of the CUTE program are to prepare the student teachers: (1) To understand their own and their pupils' environment and culture; (2) to understand their own and their pupils' attitudes, insecurities, anxieties, and prejudices; and (3) to understand and possess competency in inquiry teaching methods.

PATTERNS OF USE

The CUTE program is a complete, semester-long course to be used in the final stages of a preservice teacher preparation program. Units are sequential and cumulative. Parts of the sociology and mental health components could be covered in separate courses to educate anyone interested in the subject matter. If greater detail is desired, parts of the program could be presented also in courses prior to the final year in the teacher education curriculum.

ASSESSMENT PROVISIONS

Although some evaluation forms to assess students' progress are included in the CUTE manual or supplementary materials, they are not a complete assessment system. Forms include rating forms to evaluate CUTE students, a few essay and objective instruments to measure mastery of certain concepts, and numerous outlines for required reports to be completed by CUTE students. Some optional, standardized instruments that can be administered on a prebasis, midbasis, and postbasis are described in the program manual. Program staff will need to construct some measurement instruments; performance criteria and other guidelines are listed in the manual to assist staff in this task.

TIME REQUIREMENTS

The CUTE program is intended to be used over a 16-week semester period. The initial 8 weeks of the program entail seminars in teacher education, sociology, and mental health. Sessions in education are scheduled approximately three times per week, sociology and mental health sessions are planned usually two times a week. Between seminars and observations in schools, field experiences in the inner city are scheduled. During the second phase of the program, CUTE students do their student teaching in an inner-city school.

One installation site adapted the program for a 2-quarter time period since this particular university operated on a quarterly system (3 quarters of 10 to 12 weeks—equivalent to a 9-month school year). Such an arrangement was successful and demonstrated the flexibility of the program.

IMPLEMENTATION PROCEDURES

Proper implementation of the CUTE program requires prior training of the installation site director and staff. Training entails a 5-day workshop on the objectives and techniques of the CUTE program. Workshop staff include program developers and others experienced in directing or teaching in CUTE programs. Field trips in the inner city are planned for workshop participants so that they go through some of the same experiences the CUTE students go through. By means of presentations and group discussions, the rationale, procedures, and operational problems are thoroughly scrutinized.

Factors which are important to the successful implementation of the program include: some initial "seed money" to help get the program started in the institution, commitment of the staff and administrators involved to both the program and urban education, qualified staff in the three substantive areas, inclination of the staff to a field-oriented approach, ability of the staff to develop good relationships with community agencies and school staffs and administrators in the inner city, interest by enough students at the institution to participate in the program, and interest and support by the local school district in the program. Particularly important is the commitment and dedication of the program director at the implementation site.

The only special equipment required for the program is video tape recording equipment to be used for microteaching sessions.

Summary Cost Information

Major costs of operating the program are personnel salaries and facilities. Other costs might include xeroxing, arranging for the live-in or other field experiences, and fees for guest speakers. Members of the instructional staff may wish to order certain optional reference texts. Access to a good university or college library is sufficient for students in the program.

Using costs incurred during the developmental phase, McREL published an estimated startup figure of $68,485 for a first-year program. Three new installation sites operating during the 1972-73 school year reported an average cost of $42,082 for their initial year. Savings apparently were due chiefly to the more efficient use of staff time in institutions where multiple duties are assigned to staff members. Assuming an enrollment of 30 students each semester, the average cost per student would be approximately $700 per academic year.

Personnel Required for Product Adoption and Implementation

Personnel required are: a full-time project director who would spend part of the time teaching in the education component, a part-time teacher educator responsible for some instruction, a part-time (at least half-time) sociologist, a part-time psychologist or psychiatrist, and a part-time secretary. Professional personnel should have at least a master's degree. Knowledge of concepts in their particular field (whether it be teacher education, sociology, or mental health) and an ability to apply that knowledge to practical situations they encounter in a teacher education program like CUTE are the most important requisites for staff instructors in CUTE.

ASSURANCES AND CLAIMS

The CUTE program has been implemented successfully at 25 sites across the country. Approximately 1,900 student teachers have been trained in the program as of the end of 1974.

The second phase diffusion effort in 1973-74 involved the training of staff for 12 new regional sites (which were trained by McREL staff and had 1 year of experience with the program) rather than by McREL program development staff. Because of the lack of necessity for major intervention by the developers in the implementation process and the high ratings of new sites by project monitors on characteristics essential to the proper implementation of CUTE, it is clear that the program is transportable.

The program materials do not appear to display any form of social bias—including ethnic or sexual stereotyping—as far as is known by the developing organization. Of the many teacher education institutions and the many students who have participated in the program, no one has issued a complaint to McREL regarding negative effects of the program. In fact, one intent of the program is to promote a positive image of low-income persons to student teachers enrolled in the program.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
CUTE manual plus attendant materials (xeroxed handouts)	4	2.00	Reusable	

DEVELOPER/AUTHOR:

Mid-continent Regional Educational Laboratory
7302 Pennsylvania Ave.
Kansas City, Mo. 64114

AVAILABILITY

Materials are available through the developer:
Mid-continent Regional Education Laboratory
7302 Pennsylvania Ave.
Kansas City, Mo. 64114

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 003

CROSS-AGE PEER HELP

Two-day workshop to train teams of school personnel to set up a cross-age tutoring program

A leader's manual and participant materials have been developed for conducting a 2-day workshop to assist teams of school personnel who wish to set up and implement a cross-age tutoring program in which older students tutor younger students. The major part of the package consists of materials for conducting a series of training seminars for the older students on how to be effective tutors.

The training process which is facilitated by two or three seminar leaders is designed so that, following participation in the training workshop and involvement in some phase of back-home implementation, a person is able to set up a training workshop for others who wish to begin a cross-age program.

SUBJECT AREA(S)

Student tutoring

INTENDED USERS AND BENEFICIARIES

Those educators and students intending to participate in a cross-age helping program may find this system useful.

GOAL(S) OR PURPOSE(S)

All participants will be able: (1) To describe the nature, purposes, and content of cross-age helping programs; (2) to develop an awareness of their own roles and the roles of other team members; (3) to develop proficiencies in communication skills as they relate to effective participation in cross-age programs; and (4) to develop an awareness of their roles in the evaluation of the cross-age program.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives.

ASSESSMENT PROVISIONS

Not applicable.

TIME REQUIREMENTS

Two full days are required for completing this workshop. All participants are requested to commit themselves to full attendance at all workshop sessions.

IMPLEMENTATION PROCEDURES

1. Two trainers are needed for this workshop because of the training for multiple roles. (For the 2d day of the workshop, three trainers—one for each role—help decidedly.)

2. Preworkshop materials need to be in the hands of the participants at least 1 week before the workshop begins.

3. The workshop is designed around teams who implement the program back home. This is a crucial part of the design.

4. Well before the actual beginning of the workshop, trainers should read over the preworkshop material, the training manual, and the material in the Lippitt Manual, *Orientation, Training, and Related Materials*, in order to become familiar with content, procedure, and materials.

5. Although the schedule of the workshop activities and directions for trainers are specific and structured, trainers may adapt these to fit their individual situations. Since the 2-day schedule is very tight timewise, trainers whose participants have more time available may wish to spread the activities over an additional 1/2-day.

6. Children (preferably 5th- and 6th-graders) are needed for demonstration purposes on each day of the workshop.

7. A large comfortable room with movable tables and chairs is needed to accommodate the total group. Beverages and refreshments should be available in the room, if possible.

ASSURANCES AND CLAIMS

Harmlessness

The draft of a training manual for use with *Cross-Age Peer Help* was given two rounds of trial and revision. Participants were asked for feedback. There were no reports from trainers, participants, or implementers regarding physical, psychological, or sociological harm.

Social Fairness

The Lippitts gave special attention to issues of social fairness in creating their system. This related manual reflects the same concern.

Replicability

Pending disposition of the draft of this manual with the Lippitts, issues of replicability still need to be explored. The manual was created to make it easy for a nonexpert to conduct an introductory workshop. The developers of the manual appeared successful in doing this.

TEACHER EDUCATION

RD 200 003

Product Development

The manual was developed over a 2-year period involving two rounds of trial and revision. Observation and questionnaire feedback of workshop participants in these trials were used in revisions. No further evaluation of the manual has been made.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Cross-Age Package (filmstrip, record, and manual)	1 for each school team	60.00	Reusable	Lippitt Human Resources Development Associates, Ann Arbor, Mich. 48106
Lippitt Manual: *Orientation, Training and Related Materials*	1 for each teacher	Contact publisher	Reusable	Lippitt Human Resources Development Associates, Ann Arbor, Mich. 48106
2-day startup participant materials	1 per participant	To be announced		To be announced
2-day startup trainer's manual (seminar leader)	1 per trainer	To be announced	Reusable	To be announced
Record player, filmstrip projector, overhead projector screen, newsprint, felt tip pens, masking tape, nametags, transparencies, and pens				Implementer

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. Second Ave.
Portland, Oreg. 97204

Ken Ames, Coauthor
Carol Hollar, Coauthor

AVAILABILITY

Cross-Age Peer Help (training manual for Lippitt material) will become available by the end of 1975. Order from:

Northwest Regional Educational Laboratory
Lindsay Building
710 SW. Second Ave.
Portland, Oreg. 97204

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 004

INTERACTIONAL ANALYSIS

Program focusing on the three phases of interaction analysis instruction: tallying, analysis, and interpretation and usage

This low-cost, mass-diffusable, competency-based instructional system includes all materials and procedures for 30-40 hours of instruction in either an inservice workshop or preservice course. There are 18 instructional sequences or units. Activities are sequenced to present an increasingly intense involvement with the three phases of interaction analysis instruction: Tallying, analysis and interpretation, and use. The effect of this spiral arrangement is a planned redundancy that eventually interlocks the skills and concepts involved. Each instructional sequence provides: A description, including a list of materials; rationale; objectives; procedures; and participant handouts. Teachers who complete the training program learn to use interaction analysis techniques for collecting data about what happens in the classroom, analyzing and interpreting the information, and using it to make sound judgments for improving instruction. In broad terms, teachers learn: To interpret instructional goals in terms of expected patterns of interaction; to gather data about the instructional materials in a classroom; to analyze interaction data to determine patterns of influence and areas of concern; to perceive the effects of different styles of verbal behavior in the classroom; to vary or limit verbal behavior to meet desired instructional goals; and to use analyzed interaction data as a basis for change in teaching behavior.

SUBJECT AREA(S)

This training system focuses on the three phases of interaction analysis (tallying, analysis and interpretation, and usage).

INTENDED USERS AND BENEFICIARIES

Classroom teachers and, indirectly, their students are the intended users.

GOAL(S) OR PURPOSE(S)

The purpose of the *Interaction Analysis* instructional system is to provide teachers with skills for using interaction analysis techniques for collecting data about what happens in the classroom, analyzing and interpreting the information, and using it to make sound judgments for improving instruction.

In broad terms, program goals would enable teachers: (1) To interpret instructional goals in terms of expected patterns of interaction, (2) to gather data about the instructional pattern in a classroom, (3) to analyze interaction data to determine patterns of influence and areas of concern, (4) to perceive the effects of different styles of verbal behavior in the classroom, (5) to vary or limit verbal behavior to meet desired instructional goals, and (6) to use analyzed interaction data as a basis for change in teaching behavior.

PATTERNS OF USE

These materials are sequentially organized toward the cumulative attainment of the stated objectives. The training design includes a great deal of participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Interaction Analysis has been deemed appropriate as an intitial experience for educators and, therefore, has no prerequisites. Throughout the workshop, participants evaluate their learning by mutual feedback, self-testing (e.g., paper-and-pencil tests), and skill practice.

TIME REQUIREMENTS

There are 18 instructional sequences with a total of 30-40 hours of instruction.

IMPLEMENTATION PROCEDURES

All new trainers should experience the workshop materials and design as a participant before attempting the trainer role. Initial cotraining with a trainer who has previously conducted the workshop is an additional benefit to a new trainer.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

During a series of trial workshops, participants were repeatedly asked for feedback concerning this system. While criticisms were used to revise the system, there were no reports from participants, trainers, or implementers indicating that physical, psychological, or sociological harm had been experienced. During the years that this instructional system has been commercially available, the developers have received no reports of harm or perceived risk from users in the field.

Assurances of Social Fairness

Social fairness issues were considered during interim rounds of trial and revision in the development of this system. While the generic "he" is sometimes used in referring to persons of either sex, the system is generally fair and has been positively accepted as such.

Assurances of Replicability or Transportability

This system was developed with the intention of its being easily used by persons involved in the training of teachers. The developers feel that persons familiar with the content of this system, experienced in conducting teacher-training courses, and experienced as workshop trainees, have successfully used this system.

Claims of Effectiveness

Field tests of the interaction analysis system took place during summer 1973. Seventy-five volunteer trainees in Oregon and Montana served as subjects.

Data collected from these trainees indicate the following results:

1. Over 90 percent of the 75 participants reported the interaction analysis workshop was satisfying and worth while.
2. Of the 75 participants, over 85 percent reported the skills learned were useful.
3. As measured on a pretest and posttest of semantic differential, participants exhibited a change of attitude in the desired direction toward self, teaching and school, and use of interaction analysis in their classrooms.
4. On a locally produced, 27-item cognitive test administered immediately after training, 90 percent of the participants scored 80 percent or better.
5. A performance test designed to measure participants' coding ability and administered immediately following training, produced a mean Scott coefficient of reliability of .496.

It can be expected that most participants of a workshop using this system will experience satisfying and significant gains. However, potential users should be cautioned not to expect a high level of proficiency in skills when applying interaction analysis unless practice sessions are added beyond the scope of this design.

Claims of Careful Product Development

This system was developed over a period of 4 years involving repeated rounds of trial and revision with K-12 teachers. Evaluation included pilot trials, interim formative testing, and summative field test where developers were not involved in the workshop sites.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	3.50		
Trainer's manual	1 for each trainer	5.00	Reusable	
7-episode training tape	1	11.00	Reusable	
Filmstrip with audiotape: "Studying Teacher Influence"	1	30.00	Reusable	University of Minnesota, Minneapolis, Minn.
Interaction Analysis Theory Research and Application	1 for each participant; 1 for each trainer	4.95	Reusable for trainer	Addison-Wesley, Reading, Mass.

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

John H. Hansen, Senior Author
Robert A. Anderson, Coauthor

AVAILABILITY

Interaction Analysis was in its second printing in 1971. It is currently available from the distributor:

Commercial-Educational Distributing Services
P.O. Box 3711
Portland, Oreg. 97208

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 005

INTERACTION ANALYSIS, A MINICOURSE

Training course for elementary and secondary teachers using microteaching to demonstrate the special skills of verbal communication

Interaction Analysis, A Minicourse is an inservice or preservice training course for teachers at both elementary and secondary levels. Special skills of verbal communication are studied, practiced in microteaching, and analyzed by using interaction analysis. Special emphasis is given to the response and question skills of the teacher and the relationships of these skills to student initiation.

The course materials are designed to provide self-instruction, self-pacing, and collaboration with fellow trainees. The work can be accomplished without the cost of a substitute teacher. The teacher reads the material for each lesson, plans a microteach, and evaluates a cassette voice recording. During the first lesson, previously recorded interaction, carefully scaled from simple to more complex interaction patterns, is used in the playback mode for practicing interaction analysis procedures.

SUBJECT AREA(S)

The subject studied is verbal communication from the teacher's viewpoint. Procedures for coding interaction on a timeline display are taught; attention is given to praising, criticizing, directing, accepting, and using student ideas and feelings, and explaining the reasons for actions that the teacher initiates. The last lesson provides a simple model of personal inquiry which a teacher can adapt to those classroom problems considered most important.

INTENDED USERS AND BENEFICIARIES

The primary user is the classroom teacher with supplementary materials for teacher supervisors and building principals. The beneficiaries are not only teachers, but also the students of these teachers.

GOAL(S) OR PURPOSE(S)

The objectives of the minicourse include: (a) Increasing the proportion of responsive statements used by a teacher, (b) increasing the proportion of student statements in which ideas and opinions are initiated, and (c) increasing the proportion of time devoted to teacher/student interaction. To accomplish these goals, teachers learn to classify statements, to code classified statements onto a timeline display which can be quickly interpreted, and to compare the displays of what happened with a display of what was intended.

PATTERNS OF USE

One or more teachers can take the course. It is recommended that they work on each of the five lessons in the sequence presented. They can proceed at their own pace, but the mutual stimulation of a group of teachers working in a coordinated fashion with the help of a supervisor is known to be more effective than working alone. All microteaching occurs during regular school hours; individual work can be scheduled whenever it is convenient.

ASSESSMENT PROVISIONS

Teachers are specifically instructed to compare early microteaches with those completed near the end of the course. Standards of performance for each lesson can be inferred from clearly stated goals and objectives, but such evaluation is the responsibility of the learner.

TIME REQUIREMENTS

The course can be completed in 6 weeks providing a teacher spends from 3 to 6 hours per week. Two weeks are recommended for the first lesson when practice with the playback cassette occurs.

IMPLEMENTATION PROCEDURES

A special orientation kit consists of throwaway handouts and one 15-minute cassette voice recording. The kit is designed for use in a faculty meeting and is intended to help the teacher decide whether to take the course.

The teacher's handbook, the coordinator's manual, the orientation recording, and a prerecorded cassette of 23 classroom episodes are all reusable. The teacher's workbook, the orientation handouts, and a pad of timeline forms are consumable and should be reordered for each cycle of training.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

There is no evidence to suggest that this product, when used as directed, will induce harm. The intent is to train teachers to use more open and unrestricted communication patterns with students. The field tests produced no known harmful results.

Assurances of Social Fairness

This product has been field tested in situations in which persons of different races and backgrounds participated. No unfair consequences were known to have occurred.

Assurances of Transportability

The materials have been used in situations in which no employee of the developer was present. The product can be adapted to the normal procedures for inservice and preservice education of teachers.

Claims of Effectiveness

A main field test report suggests that most of the teachers who took the course in the main field test modified their patterns of classroom interaction so that more responsive statements occur and more student initiation statements occur. The primary field test involved 19 elementary and 11 secondary teachers (see: Lai, M. K. *Main Field Test Report—Interaction Analysis*: A73-12, 1973, page 81; available from the Far West Laboratory, 1855 Folsom St., San Francisco, Calif. 94103.)

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Interaction Analysis handbook	1 per teacher	4.00	Reusable	
Interaction Analysis workbook	1 per teacher	3.00	Consumed by each teacher	
Interaction Analysis coordinator's manual	1 per coordinator	2.00	Reusable	
Cassette of 23 classroom episodes (prerecorded)	1 per teacher preferred; can be shared by 2 teachers	6.00	Reusable	
Pad of timelines	1 per teacher	.85	Consumed by each teacher	
Orientation kit				
(a) Handouts for faculty meeting	1 per member at meeting	5.00 per 100	Consumable	
(b) Cassette recording	1 per meeting	5.00	Reusable	

Note: When reusable materials are used for 3 cycles of training, the average cost of materials is $6.75 per teacher.

Special equipment: Each teacher requires the use of an ordinary cassette voice recorder to be used both for playback and for making a live recording of a microteach. Cost varies.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Ned A. Flanders, Project Director
Edwenna Werner, Staff Director
Rachel Ann Elder, Staff Member
Jacomina Newman, Staff Member
Morris K. Lai, Evaluation Specialist

AVAILABILITY

The product was published November 1974 and is distributed by:

Paul S. Amidon & Associates, Inc.
4329 Nicollet Ave. South
Minneapolis, Minn. 55409

RD 200 006

INTERDISCIPLINARY FACULTY TEAMING: A WORKSHOP

Series of activities to encourage development of teams of members from different facets of the teacher education faculty

The *Interdisciplinary Faculty Teaming Workshop* is a series of activities designed to facilitate the establishment and growth of teams composed of members of various sectors of the teacher education faculty. The workshop addresses skills in planning, communicating, and organizing programs to facilitate consideration of students' needs as well as needs of the faculty team itself. This emphasis on students' needs includes attention to their personal needs and feelings as well as their cognitive growth.

Interdisciplinary faculty teams are becoming more and more common in teacher education programs around the country. The teams aim to work together to provide a more integrated and concentrated program for preservice teachers. However, functioning as a member of a faculty team requires skills that faculty members cannot be assumed to possess. The experiences in the program develop these skills by allowing teams to work together in a directed, task-oriented situation with some of their own problems and concerns. Skills such as planning and problem solving, decisionmaking, effective communication, and evaluation of group effort are included.

There are two versions of this workshop: One covers 3 days and the other, 2 days. In addition to the series of experiences included in these two versions, a handbook of supplemental experiences and information is available to facilitate continual growth in the skills of faculty teaming.

SUBJECT AREA(S)

This workshop involves training educators in the skills necessary to participate successfully on a faculty team. The skills include communicating, planning, problem solving, decisionmaking, establishing meeting procedures, and identifying resources.

INTENDED USERS AND BENEFICIARIES

Although originally developed for use with teacher education faculty, this workshop has been used equally well with classroom teachers.

GOAL(S) OR PURPOSE(S)

The participant completing the workshop will possess both individual skills that enhance personal contribution to a team and skills that facilitate the process of teaming. Individual skills include communication skills such as paraphrasing and giving and receiving feedback and team support skills such as initiating, summarizing, and gatekeeping. Team process skills include decisionmaking, program planning, evaluation, and problem solving.

PATTERNS OF USE

The 3-day workshop is a series of 10 units in which intact teams participated. The 2-day workshop involves nine units of these same units that have been shortened. In each case, the units are sequential and cumulative and require a trainer for direction. A handbook of supplemental units is also available for use at any time subsequent to the workshop.

ASSESSMENT PROVISIONS

A preworkshop inventory is provided to give the workshop leader an indication of participant expectations and major questions about the subject matter of the workshop. Additional inventories at the end of each day provide continual feedback to the leader as to the climate, relevancy, and clarity of the workshop.

TIME REQUIREMENTS

In its long version, this workshop requires 3 days, approximately 6 to 7 hours per day. The shorter version requires 2 days of the same length.

IMPLEMENTATION PROCEDURES

The primary requirement for this workshop is freeing individuals to participate for the full extent of the workshop session. No special equipment is necessary. Two commercially available 16mm films and various handouts are used during the workshop.

ASSURANCES AND CLAIMS

The workshop was pilot tested by the developers with teams in three different university settings. Formative evaluation data were used to revise the workshop content, timing, and packaging in spring 1974. Since that time, various components of the workshop have been used without the developers present, in both schools and colleges, with positive results. It is most effective when used with working teams, rather than collections of individuals.

Success of the workshop is highly dependent upon the workshop leader. Qualities such as experience in working with groups and university faculty members, flexibility in timing and depth of content, and sensitivity to the needs of participants are required. The leader's manual and the handbook describe in detail the requirements of the workshop, plus possible alternative routes and followup activities. The leader must be able and willing to temper the requirements of the workshop with knowledge of participant concerns in implementing the workshop.

Workshop materials have been scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Interdisciplinary Faculty Teaming manual includes instructions for trainer, material lists, and masters for participant handouts	1		Reusable	
Participant handouts—masters in manual	1 set per participant	Printing cost	Consumable	Workshop leader
A Handbook for Interdisciplinary Faculty Teaming	1 (optional)		Reusable	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

Gene E. Hall, Coordinator
Robert E. Pennington, Project Associate
Julienne K. Pendleton, Project Associate

AVAILABILITY

The *Interdisciplinary Faculty Teaming Workshop* is currently available from:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 007

MINICOURSE 1: EFFECTIVE QUESTIONING–ELEMENTARY LEVEL

A microteaching program to train teachers to ask more effective questions in class discussions

Effective Questioning is one of a series of minicourses developed by the Far West Laboratory for Educational Research and Development. The minicourses are based on the Stanford microteaching program; teachers watch films demonstrating specific teaching skills, practice using a skill by microteaching (teaching a short lesson to a small number of students), and video tape their performance so they can evaluate themselves afterwards. By repeating this sequence for a number of skills, teachers can help themselves improve their teaching ability. The immediate feedback via video tape provides strong reinforcement for skills the teachers wish to cultivate.

The minicourse is aimed at developing the ability to ask questions in class discussions. The teacher learns ways to reduce the amount of teacher talk in class, to encourage indepth student responses to questions, and to avoid certain teacher behaviors that can interfere with class discussion. To work on a specific skill, the participant follows this instructional sequence: Read an appropriate section from the teacher's handbook, view an instructional film, plan a microlesson (5-15 minutes), microteach the lesson (while video taping it), view the video tape to evaluate use of the skill, replan the lesson, reteach and retape it, and reevaluate the performance. The teacher uses the minicourse's self-evaluation forms to judge skill performance at each stage. Direct supervision is neither required nor suggested, so the teacher is free from the anxiety frequently associated with programs using video tapes of the teacher's performance.

SUBJECT AREA(S)

Inservice or preservice teacher training in the use of questioning in class discussions.

There are eight lessons which develop teacher skill in calling on nonvolunteers, using higher cognitive rather than fact questions, using redirection, asking questions that call for longer pupil responses, prompting, and avoiding the repetition of pupil answers or repeating of questions.

INTENDED USERS AND BENEFICIARIES

The intended users of this minicourse are teachers of upper elementary grades in all subject areas where class discussion is used as an instructional technique.

GOAL(S) OR PURPOSE(S)

This course is designed to train teachers to use techniques which will increase pupils' participation in class discussions.

PATTERNS OF USE

The minicourse is an autoinstructional package. *Minicourse 1* consists of 11 reels of film of instructional and model lessons. The teacher's handbook contains instructional material and self-evaluation forms. Skills and concepts are sequenced according to increasing difficulty.

ASSESSMENT PROVISIONS

Teachers volunteer to take *Minicourse 1*. Teachers evaluate their own performance; there are no provisions for evaluation by others. Self-evaluation forms are provided.

TIME REQUIREMENTS

Three hours of class time per week for 5 weeks, plus an equal amount of preparation time after school, is required.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the 16mm instructional/model films to participating teachers. A room with the video taping equipment and seating for the teacher and five students should be set up and made available for microteaching.

A staff member or the coordinator should be made available to relieve a teacher who is scheduled to microteach during class time.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially, the school or district should provide a 20-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Participants in the three field tests during the development cycle noted no harmful effects. Of 96 teachers who took *Minicourse 1* in Florida, 76 percent felt the course was more effective than other inservice training. The course was tested in different socioeconomic settings and was found to be effective in all settings.

The minicourse was field tested 3 times during its development—a preliminary field test with 6 teachers in 2 schools, a main field test with 48 teachers drawn from 12 elementary schools in 6 districts, and an operational test with 58 teachers. Laboratory development staff members were heavily involved in the preliminary and main field tests and the course was revised, based on the findings from these tests. The operational field test was carried out without development staff assistance. The course was coordinated by regular school personnel, assuring the course's transportability and replicability.

The effects of the minicourse on teacher behavior may be seen through some of the results of its main field test. Before taking the course, participating teachers talked in class discussions about 52 percent of the time; after the course, they talked only 28 percent of the time because they had learned to encourage more student participation. Before the course, only 37 percent of the teachers' questions asked the students to make higher cognitive responses (such as formulating hypotheses instead of just recalling facts); after the course, 52 percent called for such responses from students. As a result, student responses to teacher questions actually doubled from an average of 5 words to an average of 12 words after the course.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,600.00*	Reusable	
Teacher's handbook	1 per teacher	2.00	Not reusable	
Coordinator's handbook	1	4.00	Reusable	
20-minute video tapes	1 per teacher	22.00	Annually**	3M, Sony, Ampex, Memorex, Karex

*Instructional films may be purchased or rented for 6 weeks for $210.00.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about 5 times; each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Walter A. Borg, Author
Marjorie L. Kelley, Author
Philip Langer, Author

AVAILABILITY

Minicourse 1: Effective Questioning—Elementary Level **was published in 1970 by Macmillan Educational Services, Inc., Beverly Hills, California. The product carries a 1970 copyright by Far West Laboratory for Educational Research and Development. Copyright is claimed until February 1975.**

Requests for preview materials and information regarding purchase or rental should be addressed to:

The Macmillan Co.
Front and Brown Sts.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 008

MINICOURSE 8: ORGANIZING INDEPENDENT LEARNING–PRIMARY LEVEL

A self-instructional microteaching program to help teachers meet individual learning needs in grades K-3

Minicourse 8: Organizing Independent Learning—Primary Level is one of a series of minicourses developed by Far West Laboratory for Educational Research and Development. Based on the microteaching program for preservice education developed at Stanford University, the minicourses are short, self-instructional courses designed to train teachers in specific classroom skills. Teachers are provided with a comprehensive handbook outlining the course. They view films demonstrating specific teaching skills, practice the skills by microteaching (teaching a short lesson to a small number of students), and later video tape their performance for self-evaluation. This sequence is repeated for a number of skills.

Minicourse 8: Organizing Independent Learning—Primary Level was designed to solve the pressing problem of meeting individual learning needs at the kindergarten and primary classroom levels. The purpose of this minicourse is to help the teacher create an independent learning environment in the classroom. The proposed classroom environment should encourage each pupil to work independently for portions of the schoolday. The teacher then has time to work with other pupils on either an individual or small-group basis, while the rest of the class is productively engaged. To create this type of learning atmosphere, which differs from the conventional classroom environment, three important conditions must be met. First, the pupils must have a clear understanding of what it means to work independently. Second, they must be able to solve problems which develop during the period of independent study. Third, they must accept and be able to wait for the teacher's comments and evaluation after their tasks are completed.

SUBJECT AREA(S)

Minicourse 8 focuses on how to organize independent learning at the primary level; it is applicable to general inservice or preservice teacher education, grades K-3.

INTENDED USERS AND BENEFICIARIES

The intended users are general inservice or preservice teachers, grades K-3.

GOAL(S) OR PURPOSE(S)

Minicourse 8 teaches a set of organizational procedures that makes it possible for teachers to uninterruptedly instruct a small group of children for 15-30 minutes while the remaining children work independently. In addition, teachers learn to teach pupils to solve problems independently and to wait for delayed teacher response.

PATTERNS OF USE

The teacher follows this instructional sequence: Read an appropriate section from the teacher's handbook, view an instructional film and a model lesson film, plan a 10-15 minute microteach lesson to be taught to four or five students, microteach the lesson (while video taping it), view the video tape to evaluate performance, replan the lesson, reteach and retape it, and reevaluate performance. Self-evaluation forms are provided.

The course consists of teacher's and coordinator's handbooks and five films, and units are sequenced according to increasing complexity of skills and concepts involved.

ASSESSMENT PROVISIONS

Minicourse 8 is an autoinstructional package. Direct supervision is neither required nor suggested. Teachers evaluate their own performance with self-evlauation forms which are provided.

TIME REQUIREMENTS

Sixteen days, 1 hour per day; optional followup lessons are provided.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model films to participating teachers. A room with the video taping equipment and seating for the teacher and four to five students should be set up and made available for microteaching.

The coordinator schedules when participating teachers are to use the microteaching room and should arrange for someone to relieve the teacher from regular classroom duties during microteaching.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide a 30-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Psychological and educational research in concept formation, problem solving, and delayed feedback and reinforcement were used in the development of this minicourse. Evidence from the main and operational field tests indicates that teachers and pupils made significant gains in the behaviors necessary for the successful implementation of independent learning in the primary classroom. All of the teachers in the operational field test felt that the product had improved their overall competence to teach their pupils; 78 percent rated it higher than other inservice education experiences; and 99 percent rated it higher than their (preservice) education courses.

Results of the preliminary field test with six teachers indicated that the concepts and teaching procedures contained in the course were incorporated into the main field test version.

The main field test in spring 1969 included 46 teachers and 1,440 pupils. Data collected in this test indicated that the teachers made gains in the skills taught in the course: Discussing the concept of working alone, explaining their own role while pupils are working alone, describing an assigned activity, identifying problems that might occur while pupils are working independently, recommending possible solutions to those problems, and setting standards for what to do when pupils have finished with independent activities.

The operational field test included 61 teachers and 1,830 pupils in 8 public schools. The majority were at kindergarten level. A later operational test was conducted with 15 classrooms, from kindergarten to 3d-grade levels. The data received as a result of the operational field tests support the conclusion that *Minicourse 8: Organizing Independent Learning—Primary Level* is effective as a self-contained unit.

Development staff participated in the coordination of preliminary and main field tests, but operational tests are carried out entirely by school personnel, thus proving the course is replicable and transportable.

RD 200 008

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,200.00*	Reusable	
Teacher's handbook	1 per teacher	4.00	Not reusable	
Coordinator's handbook	1	4.00	Reusable	
30-min. video tapes	1 per teacher	22.00	Annually**	3M, Sony, Ampex, Memorex, Karex

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*Films may be purchased, they may also be rented for 6 weeks for $200.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about 5 times; each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Beatrice A. Ward, Author
Majorie A. Kelley, Author
Walter F. Stenning, Author

AVAILABILITY

Minicourse 8: Organizing Independent Learning—Primary Level was published by Macmillan Publishing Co., Inc., New York, in 1971. Copyright is claimed by Far West Laboratory for Educational Research and Development until November 15, 1981.

Requests for preview materials and information regarding purchase or rental should be addressed to the distributor:

Macmillan Publishing Co., Inc.
Front and Brown Streets.
Riverside, N.J. 08075

INFORMATION CURRENT AS OF MARCH 1975 ■

MINICOURSE 10: ROLE PLAYING IN THE CLASSROOM

A microteaching approach to help teachers plan student role-playing activities for grades 4-12

Minicourse 10: Role Playing in the Classroom is a course to help teachers train pupils to use role playing for instructional purposes in the classroom. Role playing is an instructional tool of considerable power and versatility. It can contribute excitement and relevancy to subject matter by substituting active involvement in learning for passivity, and it can provide a vehicle for students to create and use their own experiences as input for learning. To be effective as an instructional tool, role playing must be employed with the same attention to planning, the same sensitivity to students, and the same care and skill that characterize the effective use of any teaching tool. This minicourse trains teachers in the specific skills needed to use role playing.

The minicourse model is an adaptation of the microteach approach developed by the Stanford Universtiy intern program. Minicourse training requires the teacher to read a lesson in the teacher's handbook; plan a lesson using a specific teaching skill; microteach using this skill (while video taping the microteach session); view the video tape to evaluate use of the skill; and if additional practice is needed, to plan, conduct, and evaluate a lesson with the whole class. The teacher is then ready to move to the next lesson.

SUBJECT AREA(S)

This minicourse focuses on role playing in the classroom.

INTENDED USERS AND BENEFICIARIES

The intended users are inservice and preservice teachers, grades 4-12, in history, literature, and social sciences.

GOAL(S) OR PURPOSE(S)

Minicourse 10 training will enable the teacher: (1) To plan role-playing experiences as instructional activities, (2) to develop in students the capacity to participate successfully in classroom drama, (3) to guide the dramatic process—the techniques of role playing and (4) to help students talk about the insights they have developed through role playing.

PATTERNS OF USE

The course lessons are sequential; the teacher and students should demonstrate effective use of skill in a lesson before moving to the next. In the first section of the course, teachers learn about procedures for initiating role playing. In the balance of the course, they give primary concern to the instructional applications of inventive classroom drama.

ASSESSMENT PROVISIONS

Teachers volunteer to take *Minicourse 10*. It is a self-instruction, self-evaluation training procedure. Direct supervision is neither required nor suggested. Self-evaluation forms are provided.

TIME REQUIREMENTS

One hour per day for 5 weeks is required.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the 16mm instructional/model films to participating teachers. A room with the video taping equipment and seating for the teacher and five students should be set up and made available for microteaching.

A staff member or the coordinator should be made available to relieve a teacher who is scheduled to microteach during class time.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coorinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide a 30-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Minicourse 10: Role Playing in the Classroom is not intended to be used as a psychotherapeutic vehicle. It is intended to serve substantive instructional purposes only and not to make public the student's private world.

During field testing of *Minicourse 10*, special care was taken to assure that teachers who were asked to use role playing were given training in its application in order to avoid negative experiences for teachers and pupils.

Socioeconomic status is not a factor in role playing, as evidenced by results of the preliminary field test where students from a low-income, inner-city area participated.

Teachers who participated in the main field test responded favorably to their training in role-playing techniques. All felt it had value as an instructional technique and intended to use role playing in the future. A total of 97 percent would recommend the course to colleagues.

Eighty-six percent of the behaviors evaluated in the main field test exhibited at a 70-100 percent level of success, with 35 percent being exhibited at the 90-100 percent level.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	*	Reusable	Not published
Teacher's handbook	1 per teacher	*	Not reusable	Not published
Coordinator's handbook	1	*	Reusable	Not published
30-min. video tape	1 per teacher	22.00	Annually**	3M, Sony, Ampex, Memorex, Karex

*Price unknown at this time since product has not yet been published.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about 5 times; each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

William J. Tikunoff, Author
Beatrice A. Ward, Author

AVAILABILITY

Course development is complete. The developer is currently seeking a publisher for the product. Inquiries should be addressed to:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

MINICOURSE 15: ORGANIZING INDEPENDENT LEARNING–INTERMEDIATE LEVEL

A self-contained microteaching program to train teachers to plan and use independent study activities in grades 4-8

Independent study is one kind of instructional technique a teacher may use in the classroom. It may be used effectively in almost any organizational structure—in a graded or nongraded school, with team teaching or predominantly self-contained classrooms, and with any kind of student grouping. *Minicourse 15* is designed to help teachers increase the independent learning opportunities of students, no matter what the setting.

The minicourse format was adapted from the standard university microteaching model in which teacher interns are video taped, giving a lesson so that they can later view and evaluate themselves. The minicourse is a self-contained package that can be used in any school where a video tape recording system is available. It is self-instructional using written materials, filmed demonstrations, lessons, microteaching, and self-evaluation procedures.

SUBJECT AREA(S)

The subject area is inservice or preservice teacher education.

INTENDED USERS AND BENEFICIARIES

All teachers in grades 4 to 8 are the intended users.

GOAL(S) OR PURPOSE(S)

The major goal is to train teachers in the introduction, implementation, and use of independent activities for pupils in 4th- through 8th-grade classes.

PATTERNS OF USE

Minicourse 15 is organized into five instructional sequences, each treating two or more teacher behaviors considered critical to successfully conducting independent learning activities. In the first sequence, teachers learn to determine how students understand the significance of independent learning and how independent they are. Several strategies for assessing the levels of independence of students are presented. The second sequence introduces the "learning contract" which serves as a guide for a student's independent learning activities. The sequence is intended to develop teacher skills in identifying and stating learning objectives. In the third sequence, the teacher is expected to develop skill in three additional phases of preparing an independent learning contract: (1) Outlining learning steps to be completed, (2) identifying resources to be used, and (3) establishing deadlines for completing various learning steps as well as for finishing the total contract. The fourth instructional sequence develops teacher skill in providing reinforcements to students, including setting checkpoints at which student progress will be reviewed. The fifth sequence presents a number of teaching skills that should help the teacher incorporate independent learning into the normal routine of the classroom.

The course consists of a teacher's handbook, a coordinator's handbook, and seven 16mm color films of instructional and model lessons.

ASSESSMENT PROVISIONS

Teachers volunteer to take *Minicourse 15*. Self-evaluation and critiques from other teachers—rather than from supervisors—are standard for all minicourses.

TIME REQUIREMENTS

The course requires 16 days of activity, 1 hour per day.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model films to participating teachers. A room, with the video taping equipment and seating for the teacher and four to five students, should be set up and made available for microteaching.

The coordinator schedules when participating teachers are to use the microteaching room and arranges for someone to relieve the teachers from regular classroom duties during microteaching.

Summary Cost Information

Initial cost to the user includes the purchase of the instructional films. The coordinator's handbook may be reused. Each teacher taking the course will require a handbook, as consumable evaluation forms and checklists are provided therein. Initially the school or district should provide a 20-minute blank video tape to be used by each teacher for microteaching and evaluation. These tapes can be reused by teachers taking the course later.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the course schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually performed by a principal or district supervisor.

ASSURANCES AND CLAIMS

Minicourse 15 underwent 2 field tests with a total of 75 teachers. The course is also being used as the basis for a research investigation of teacher effectiveness in independent learning instructional programs. Approximately 80 teachers are engaged in this research effort which is being conducted in a large urban school district.

The main field test of the course investigated teacher acquisition of skills in assessing students' levels of independence and in establishing an independent learning contract system.

In assessing students' levels of independence, teachers made major gains in asking students to identify both general and specific topics to be studied, obtaining information regarding students' ability to set deadlines, seeking information regarding the number and variety of resources students can identify, and outlining learning steps. The teachers also reduced significantly the proportion of times they told the student what to do as contrasted with asking them for ideas, an important feature of an assessment process.

In setting up independent learning contracts, teachers made significant changes in their performance in specifying learning outcomes that require more than recall of facts, specifying how learning will be demonstrated, specifying learning steps, organizing learning steps, using manipulative activities, establishing checkpoints, setting deadlines, and describing an anticipated activity.

At the end of training, the minicourse teachers differed significantly from a group of control teachers in all these areas except the levels of learning in the contract. They also differed significantly from the control group in the specificity with which they stated what the student was to learn.

The preliminary form of the course was developed after a careful search of the literature on individualized instruction, open education, and contingency management. After testing the preliminary form of the course with 5 teachers, revisions were made and the main field test was conducted in 3 locations with approximately 20 teachers in each site. Results of effectiveness of the course are based upon this main field test. Data regarding the teaching strategies contained in the course are currently being obtained as part of the research study mentioned above.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Instructional/model films	1 set	1,200.00*	Reusable	
Teacher's handbook	1 per teacher	4.00	Not reusable	
Coordinator's handbook	1	4.00	Reusable	
20-minute video tapes	1 per teacher	22.00	Annually**	

*Films may be purchased, or rented for $175 for 6 weeks.

**A video tape can be recorded, erased, and rerecorded about 400 times. Unless a teacher wishes to keep the tape, it can be reused about 5 times; each teacher taking the course needs a tape—he/she cannot share.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Beatrice A. Ward, Author

AVAILABILITY

***Minicourse 15* was published by MacMillan Publishing Company, New York, 1973. Copyright is claimed by Far West Laboratory for Educational Research and Development until April 1983.**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 011

MINICOURSE 23: CLASSROOM MANAGEMENT THROUGH POSITIVE REINFORCEMENT

A microteaching approach to introduce teachers of grades 1-6 to basics of reinforcement theory

Minicourse 23: Classroom Management Through Positive Reinforcement has been designed for teachers of grades 1-6 who have not had any training in positive reinforcement skills. The objectives of the course are to train the teachers in the fundamentals of reinforcement theory and to provide practice in using positive reinforcement skills in the classroom. The course would also be useful to those teachers who are familiar with reinforcement theory but would like an opportunity for further practice in the classroom.

This course will give teachers the opportunity to practice a variety of reinforcement skills.

The course uses microteaching as an instructional technique for teachers taking the course. Microteaching allows a teacher to practice the new skills in small-group situations. Analysis of video tapes or audiotapes of these microteach sessions gives the teacher feedback on how well the new skills were used.

SUBJECT AREA(S)

Inservice or preservice training of teachers, grades 1 to 6, and elementary school principals is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users are all teachers in grades 1-6. The course skills could be used in other grades with some modification. Elementary school principals will also find the course useful.

GOAL(S) OR PURPOSE(S)

In order to acquire positive reinforcement skills, the teacher learns: (1) To use verbal and nonverbal attention to reinforcing students, (2) to use classroom activities or privileges to reinforce one student, and (3) to make the classroom environment more reinforcing to students and teachers.

PATTERNS OF USE

The content and activities of each lesson are to be presented sequentially. The course instructs teacher trainees in the use of positive reinforcement with students and their classrooms.

ASSESSMENT PROVISIONS

Teachers volunteer for *Minicourse 23* training. The course is self-instructional and makes use of self-evaluation. Direct supervision is neither suggested nor recommended.

TIME REQUIREMENTS

Approximately 7 weeks, 4 to 6 hours per week are required.

IMPLEMENTATION PROCEDURES

The coordinator should arrange for facilities to show the instructional/model video tapes to participating teachers. A room equipped with the video taping equipment and seating for the teacher and six students should be set up and made available for microteaching.

The coordinator schedules when participating teachers are to use the microteaching room and arranges for someone to relieve the teacher from regular classroom duties during microteaching.

MATERIALS AND EQUIPMENT

Materials for the course are currently not available. Work was stopped after the feasibility test due to a lack of funds. The complete course would consist of a teacher's handbook, a coordinator's handbook, a principal's module, and instructional/model films. Each teacher would need a 30-minute video tape to use for microteaching.

Summary Cost Information

Reusable components of this course are the instructional/model films, the coordinator's handbook, and the video tapes used for microteaching, which can be reused 5 times. The teacher's handbook and principal's module would be consumable because they contain self-evaluation forms.

Personnel Required for Product Adoption and Implementation

A coordinator recruits teachers to take the course, introduces the course and methods to the teachers, sets up the schedule, and maintains the video tape equipment. Any staff member could fill this role, but it is usually filled by a principal or district supervisor.

ASSURANCES AND CLAIMS

Nineteen teachers participated in a feasibility test of the course materials. A feasibility test is not designed to collect data on acquisition of teachers' skills, but to get teacher response to the design of training materials. To make the course more successful, changes were made as a result of this test.

The course materials have been shelved preparatory to the conduct of a preliminary field test. This test will validate the content and structure of the course. Data on effectiveness of the course will not be gathered until a main field test with a large sample of teacher trainees has been conducted.

RD 200 011

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

John Cockrell, Author
Lynn Whitmore, Author

AVAILABILITY

The course is not currently available. Information regarding status can be obtained from the developer:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

INFORMATION CURRENT AS OF MARCH 1975 ■

MODULES AND THEIR ROLE IN PERSONALIZED PROGRAMS (MTRIPP): A WORKSHOP

Two-day workshop to introduce educators to competency-based teacher education

Modules and Their Role in Personalized Programs (MTRIPP) is a 2-day workshop for educators who are interested in pursuing competency-based, personalized and/or modularized instruction. The workshop has time flexibility with four interchangeable parts, each accompanied with a slide-tape show, participant activities, and discussion/feedback. The four parts focus on: (1) The structure of instructional modules, (2) their use in teacher education programs, (3) the characteristics and development of a competency-based program, and (4) strategies to personalize competency-based and/or modularized programs.

The MTRIPP workshop was developed in response to a need voiced by teacher educators to become familiar with the theory and strategies necessary to implement competency-based instructional programs. The workshop models the CBE approach: Participants know the objectives in advance; they frequently select the means for attaining the objectives; and a variety of modes of learning are offered, including audiovisual aids, readings, and interaction with the workshop leader. The workshop is trainer-directed; participants become fully involved through small-group work, simulations, and discussions.

The MTRIPP workshop can be approached and has been approached with different focuses for different audiences, since the sequence and level of the materials can vary. It has been used extensively to introduce teacher educators to competency-based teacher education, with strategies for instruction through learning modules and personalizing programs. It has also been approached as an introduction for teachers of school-age children to self-instructional learning packets. Other uses include an orientation for higher education faculty to objectives-based instruction in colleges and professional schools. The materials on concerns of teachers have been used with both school- and university-based teacher educators.

The MTRIPP materials include four slide-tape presentations, a prototype participant's notebook with master copies of handout materials, a folder of overhead transparencies, and a detailed manual for the workshop leader.

SUBJECT AREA(S)

Development of personalized, competency-based instruction.

Four self-contained components cover the following topics: (1) The structure of instructional modules, (2) use of modules in a course or program, (3) developing a competency-based program, and (4) personalizing a competency-based program.

INTENDED USERS AND BENEFICIARIES

The MTRIPP workshop was designed for use with teacher educators. However, it has also been used effectively with schoolteachers, liberal arts college faculty members, and health science faculty.

GOAL(S) OR PURPOSE(S)

The participant completing this workshop will be able: (1) To apply knowledge of the structure and use of instructional modules to modularizing a course or program for students, (2) to describe the characteristics of competency-based instruction, and (3) to outline strategies to personalize a competency-based program.

PATTERNS OF USE

Four self-contained components can be sequenced in any order. These components each contain a slide-tape show, participant activities, and discussion/feedback.

ASSESSMENT PROVISIONS

A preworkshop inventory is provided to give the workshop leader an indication of participant expectations and major questions about the subject matter of the workshop. Two additional inventories, one at the end of the first day and one after the second day, provide continual feedback to the leader as to the climate, relevancy, and clarity of the workshop.

TIME REQUIREMENTS

The complete workshop requires approximately 12 hours, most effectively accomplished in two 6-hour periods (excluding a lunch break). Each of the four components, when used separately, requires from 2 to 4 hours.

RD 200 012

IMPLEMENTATION PROCEDURES

The workshop requires a leader who is familiar with and experienced in competency-based instruction. One leader for each 30 participants is suggested, and several leaders can conduct the workshop for larger groups of participants. Standard audiovisual equipment and a large meeting room with flexible seating and work space are required.

ASSURANCES AND CLAIMS

The MTRIPP workshop was field tested by the developers with more than 400 educators in more than 10 university and school settings. Formative evaluation data were used to revise the workshop content, timing, and packaging in spring 1974. The workshop has since been led by other than the developers with equally positive results, as indicated by postworkshop inventories. Several of the institutions sponsoring the workshop are currently involved in competency-based programs, relying on the workshop as orientation for faculty.

Success of the workshop is highly dependent upon the workshop leader. Qualities such as experience with modules and competency-based programs, flexibility in timing and depth of content, and sensitivity to the needs of the participants are required. The leader's manual describes in detail the requirements of the workshop, plus possible alternate routes and supplementary and followup activities. The leader must be able and willing to combine the resources and information provided with knowledge of participant concerns in implementing the workshop.

An attempt has been made to eliminate social bias and inappropriateness of content from workshop materials. However, due to circumstances of the design, one slide-tape presentation uses predominantly female pronouns when referring to teachers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
MTRIPP kit including 4 slide-tape shows, leader manual, participant handout masters, overhead transparencies	1	135.00	Reusable	
Participant handouts (Masters included in kit)	1 set per participant	Printing cost	Consumable	Workshop leader
Sample modules, books relevant to workshop content, module catalogs	Variable	Variable	Reusable	Workshop leader

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

Gene E. Hall, Coordinator
Julienne K. Pendleton, Project Associate
Susan F. Loucks, Project Associate

AVAILABILITY

The MTRIPP workshop is currently available from:
Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.114
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

TEACHER EDUCATION

RD 200 013

SELECTING COMPUTER INSTRUCTIONAL MATERIALS

Materials to provide elementary and secondary teachers with an introduction to the basics of using computer hardware for computer-enhanced instruction

There are five units in *Selecting Computer Instructional Materials*. Four of these units make up the Background Units; the fifth is How To Select.

The units are:

1. *Background Unit: Hardware at a Glance*—This unit consists of 21 pages of information designed to introduce the user to the fundamental aspects of computer hardware. The unit describes the three basic types of hardware, input/output units, central processing unit, and storage devices; and provides a brief introduction to software and its uses.
2. *Background Unit: Software at a Glance*—This is a 47-page unit designed to introduce the user to several aspects of computer software.
3. *Background Unit: The Roles of Computer in Instruction*—This is a 46-page unit describing the role of the computer in drill and practice, tutorial, data analysis, problem solving, and simulation and games.
4. *Background Unit: Computers in the Curriculum*—This is a 149-page booklet which consists of a series of readings in computer applications written by experts in a number of curriculum areas.
5. *How to Select*—This is a 59-page description on what to look for in good uses of the computer and how to evaluate the units.

SUBJECT AREA(S)

The subject area is computer technology.

INTENDED USERS AND BENEFICIARIES

The primary intended users are teachers in elementary and secondary schools with a secondary audience of college inservice instructors.

GOAL(S) OR PURPOSE(S)

The purposes of these materials are to provide teachers with a means for evaluating computer-enhanced instruction and to make teachers more knowledgeable users of computer-enhanced instruction.

PATTERNS OF USE

This material is primarily intended for the instruction of upper elementary and secondary school teachers who have some access to computers. Since computer-enhanced instruction materials are highly subject oriented, this instruction is primarily for those teachers who are deeply involved in one or two subject areas. However, secondary audiences for these materials may be experts in computer-enhanced instruction applications and college ~~or~~ inservice instructors interested in teaching about computer-enhanced instruction.

These units may be used in several different ways. The original intent of the developers was that all five booklets were to form the basis for a 4-day workshop on selecting computer-enhanced units, with *How To Select* to serve as the primary text and the background booklets to serve as a supplement for those participants who might lack some necessary knowledge about computers in instruction. It was expected that these workshops would include participants with varying experience with computers. The background booklets were designed to bring all participants to a common level of knowledge. However, alternate formats have been proposed and employed. In one case, only the background booklets were used as the basis for a 4-day workshop for teachers who knew little about computers, and in the other case, *How To Select* was used as the basis for a 4-day workshop for teachers with computer experience. Thus, these materials can be used in a number of settings where persons are interested in instructional applications of the computer.

ASSESSMENT PROVISIONS

There are comprehension checks at the end of each unit.

TIME REQUIREMENTS

These materials were designed to be used in workshop settings that would last about 4 full days.

IMPLEMENTATION PROCEDURES

It is desirable to have a trained computer specialist and a time-sharing computer system with instructional programs available on the system for demonstration.

The instructor should be thoroughly familiar with these materials, as well as the instructional programs that are available on the computer system.

Provisions for getting demonstration programs running should be made well in advance of the workshop so that there will be no problems during the workshop.

ASSURANCES AND CLAIMS

No known harmful effects were noted by the observers during field test situations, nor have any been reported since the product has been in the field.

While the materials have not been specifically analyzed for racism or sexism, there is no evidence that either is present.

The materials are designed to be used with a computer and computer terminals, but they are also being used without computer access. Therefore, they can be used and are being used where computer systems are available, as well as in regular classroom situations.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Background unit: Hardware at a glance	1 per participant	To be announced		To be announced
Background unit: Software at a glance	1 per participant	To be announced		To be announced
Background unit: The roles of the computer in instruction	1 per participant	To be announced		To be announced
Background unit: Computers in the curriculum	1 per participant	To be announced		To be announced
How to select	1 per participant	To be announced		To be announced
Timesharing computer system (desirable)				Implementer

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

AVAILABILITY

The program is not currently available. A publisher has not yet been selected.

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 014

SETTING UP THE CLASSROOM (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)

Training manual presenting guidelines for kindergarten teachers in developing a constructive classroom atmosphere

Setting Up the Classroom is a training manual that presents guidelines for teachers to use in setting up and equipping their classroom. Precise specifications are not given since physical facilities vary from school to school. Certain basic principles of designing and equipping classrooms for young children are discussed.

Setting Up the Classroom consists of six chapters. Chapter 1, "Learning Centers," describes the number of learning centers needed, depending on the number of children assigned to a class, the size of the room, and the available equipment. The manual provides information for the user that includes ways to clearly define each learning center. It also relates information about each learning center and its relationship to other learning centers. Additional suggestions are given for other areas such as a listening center and a display area.

Chapter 2, "Storing and Displaying Equipment," encourages proper use of equipment and discusses the manner in which equipment is stored and displayed in the classroom.

Chapter 3, "Wall Displays," gives guidelines for ideal learning environments as well as for pleasing, decorative, and functional displays.

Chapter 4, "The Total Classroom," gives helpful suggestions in attending to all aspects of the classroom. These guidelines include information on traffic lanes, distractions, and conveniences.

Chapter 5, "Housekeeping," emphasizes the importance of having basic cleaning materials handy. It also emphasizes how the neatness of a classroom eliminates hazards as well as provides a suitable working atmosphere for children.

Chapter 6, "Illustration," is a unique feature of the publication. It contains color photographs illustrating specific aspects of learning-center arrangements, traffic lanes, equipment displays, and wall displays. The photographs were taken in actual classrooms used in SEDL programs. All illustrations have accompanying comments.

SUBJECT AREA(S)

This manual focuses on classroom arrangement and equipment.

INTENDED USERS AND BENEFICIARIES

This product was designed primarily to give assistance to kindergarten teachers and supervisors in charge of staff training. Teachers and supervisors who have used the product have reported it to be most helpful.

Other potential users are teachers working with individually guided education classes and open classrooms. This product not only meets the needs of teachers, but also may be used by research and development centers, curriculum specialists, teacher training institutes, and college and university instructors.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to help teachers learn how to save time, minimize confusion, develop a constructive classroom atmosphere, and develop ways in which to equip and decorate their classrooms.

PATTERNS OF USE

Setting Up the Classroom is a self-instructional manual that can serve as a helpful resource throughout the year. It may be used by supervisors, coordinators, head teachers, or administrators for the training of other personnel. The information is presented in a way which assists users in easily adapting ideas to suit individual needs.

ASSESSMENT PROVISIONS

Assessment provisions are in the form of self-administered checklists for teacher use.

TIME REQUIREMENTS

The training package is intended for use as an ongoing information source; the amount of time spent in assimilating and implementing the suggested strategies depends upon the judgment of the individual user.

IMPLEMENTATION PROCEDURES

Although the manual is primarily self-instructional, trainees may benefit from workshops where detailed explanations and specific questions are addressed. To take full advantage of the individualized nature of the product, users should adapt the information to fit the teaching situation.

ASSURANCES AND CLAIMS

Teachers and administrators have found the information in this manual to be appropriate for use with young children in open-classroom settings, individualized-learning centers, and self-contained classrooms. The information is effective in each of these instructional environments and has been effectively used with both self-contained and team-teaching strategies. Although the manual has been used primarily with individualized instructional programs for young children, comments from users indicate its applicability in different situations involving all grade levels.

The manual was utilized by multicultural teachers. The program staff, also multicultural, reviewed the materials for biases and made changes where necessary. Since marketing, the product has been carefully reviewed by school personnel who expressed a desire for their schools to become demonstration centers. The program staff has found the manual usable without training, therefore assuring replicability and transportability.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Setting Up the Classroom (training manual)	1 per person	6.00 (subject to change)		

DEVELOPER/AUTHOR:

Southwest Educational Development Laboratory
211 East 7th St.
Austin, Tex. 78701

Robert S. Randall, Program Director
Reva P. Bell, Program Coordinator

AVAILABILITY

Setting Up the Classroom **was copyrighted in 1973, and copyright is claimed until 1978. It is currently available from:**

National Educational Laboratory
P.O. Box 1003
Austin, Tex. 78767

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 015

SYSTEMATIC AND OBJECTIVE ANALYSIS OF INSTRUCTION (SOAI)

Teacher instruction in self-analysis and analysis of the teaching skills of others

The low-cost, mass-diffusible, competency-based instructional system for teachers, supervisors, and administrators provides all materials and procedures for conducting 100 hours of instruction. Organized into 47 instructional sequences or steps, it is conducted as an inservice workshop or preservice course.

The 47 steps vary in length from 15 minutes to 4 hours. The steps are structured sequentially as lecture, seminar, and practicum activities. This arrangement provides for the continuous input and application of knowledge, resulting in a broadening base of reference information for increasingly sophisticated levels of trainee performance. The orientation is toward achieving group unity and increasingly higher levels of group planning and decisionmaking, with diminishing levels of dependence on the trainer. Each lecture through step 17 comprises all trainees involved in the program, meeting in a large-group situation. The remaining seminar sessions can be conducted by individual trainers in regular practicum groups. Each practicum group is composed of up to 10 trainees and a trainer. Each operates independently of the other practicum groups in the workshop. Therefore, it is not to be expected that each of the practicum groups will necessarily engage in the same activities simultaneously or be in the same stages of development.

A doing-looking-learning type of instruction is used. In developing new skills, trainees: (1) Plan daily lessons together, (2) observe teachers using the plans with pupils, (3) learn to record systematically what happens in the classroom, (4) analyze objectively the information for patterns of teaching behavior, and (5) use the information to plan ways of improving instruction. Participants who complete the training, learn skills in interpersonal relations, supervisory techniques, and teaching strategies that can be applied in self-analysis and the analysis of other teachers for the improvement of instruction.

SUBJECT AREA(S)

Subject areas include interpersonal relations, supervisory techniques, and teaching strategies for self-analysis and the analysis of other's teaching.

INTENDED USERS AND BENEFICIARIES

Supervisory personnel, classroom teachers, and indirectly, the students are the intended users of this program.

GOAL(S) OR PURPOSE(S)

Systematic and Objective Analysis of Instruction is designed to enable each trainee to do the following: (1) To demonstrate provisionally different behaviors as a means to internalizing learning, (2) to demonstrate interpersonal communication skills such as paraphrasing, perception checks, behavior descriptions, describing feelings, and freeing responses; (3) to demonstrate increased interdependence in a group by applying the principles of effective group process; (4) to demonstrate skill in establishing interpersonal relationships with others by applying the principles for building trust; (5) to plan instructional objectives with a teacher which include observable pupil behavior, conditions for learning, and criteria of acceptable performance; (6) to observe a teaching performance and record in verbatim transcript most of the verbal and nonverbal behavior; (7) to analyze the transcript from the observation for patterns of teaching and learning behavior; (8) to plan strategy for a conference based on analysis of the transcript; (9) to conduct a conference which enables the teacher to gain insight into teaching and possible alternative behaviors; and (10) to interpret one's own and other's performance critically in relation to the objectives of this program.

PATTERNS OF USE

These materials are sequentially organized to achieve a cumulative attainment of the stated objectives. The training design includes extensive participant interaction for feedback, simulation trials, and interdependent action. For this reason, all participants are required to commit themselves to full attendance at all workshop sessions.

ASSESSMENT PROVISIONS

Educational personnel (teachers, supervisors, and administrators) who volunteer are asked to commit themselves to full workshop and practicum participation. This workshop combines mutual feedback by participants, with self-analysis and analysis of other teachers for the improvement of one's instruction.

TIME REQUIREMENTS

The 47 instructional sequences of this system are organized into a workshop or campus class requiring 100 hours of training.

IMPLEMENTATION PROCEDURES

Since small-group activities are an integral part of the program, the maximum trainer-participant ratio is 1 to 12.

Participation in the program requires a full-time effort from the participants for 4 weeks.

For each group of 12 participants, 2 laboratory school classrooms (15 pupil minimum including teachers) are required during the last 3 weeks of the program.

Ordinary classrooms are the only facilities requirement. For each group of 12 participants, 2 classrooms are required for the laboratory school classes and 1 additional room for seminars.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

During a series of trial workshops, participants were repeatedly asked for feedback concerning the system. There were no reports from participants, trainers, or implementers to indicate that physical, psychological, or sociological harm had been experienced by participants.

Assurances of Social Fairness

Social fairness issues were considered during interim rounds of trial and revision resulting in some early modifications of this system. While the generic "he" is sometimes used when referring to persons of either sex, the system is generally fair and has been positively accepted as such.

Assurances of Replicability and Transportability

This system was designed for use by persons whose roles involve them in providing training for teachers and training of those who supervise teachers. In trial workshop sites, the developers observed that individuals who are familiar with the content of this training, have had trainee experiences in workshops, and have worked as cotrainers in conducting a workshop have successfully conducted the training for others.

Claims of Effectiveness

This instructional system was submitted to field testing during summer 1971. The test population consisted of 116 volunteer educators at 2 workshop sites in Oregon. Data collected indicated the following results:

1. Participants perceived the training as beneficial and appropriate. They rated the system 7.89 on a 9.0 scale.
2. Statistically significant cognitive gain was observed in trainees who responded to a locally produced, 30-item test administered prior to and following the training. Ninety percent of the trainees scored at or about the 75th percentile on the posttest.
3. Use of trainee communications skills, which were focused on in the workshop, increased significantly as observed on audiotapes collected daily during the first week of training and twice weekly until the end of training.

Claims of Careful Product Development

This system was developed over a 4-year period involving repeated rounds of trial and revision with K-12 teachers and administrators. Evaluation included pilot trials, interim formative testing, and summative field testing where developers were not involved.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Participant materials	1 for each participant	8.50		
Training manual	1 for each trainer	11.50	Reusable	

DEVELOPER/AUTHOR:

Northwest Regional Educational Laboratory
Lindsay Bldg.
710 SW. Second Ave.
Portland, Oreg. 97204

James R. Hale, Senior Author
R. Allan Spanjer, Coauthor

AVAILABILITY

Systematic and Objective Analysis of Instruction (SOAI) was copyrighted in 1972, and copyright is held by the Northwest Regional Educational Laboratory. It is currently available from the distributor:

Commercial-Educational Distributing Services
P.O. Box 3711
Portland, Oreg. 97208

INFORMATION CURRENT AS OF MARCH 1975 ■

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RD 200 016

TEAMS-GAMES-TOURNAMENT (TGT) INSTRUCTIONAL PROCESS CURRICULUM UNITS

An instructional method of using group competition among groups of students having equal ability

Teams-Games-Tournament (TGT) is an instructional method that produces a major reorganization of the classroom. The classroom is reorganized by dividing the students into groups of four or five members of varying abilities. The members of these groups compete individually in an instructional game against members of equal ability from other groups. In the competition, the members score points for their team. Grades are awarded to each group on the basis of the points scored by the entire group.

The TGT instructional method is applicable to grades 3-12, and is appropriate for any curriculum unit in which the objective is to teach basic skills and/or factual information. It is effective for teaching these skills to students of all ability levels.

The teacher may use TGT in one of two ways. First, TGT can be applied by the teacher by using only the teacher's manual. This requires that the teacher follow the manual directions for assigning the students to teams on the basis of their achievement levels, making instructional games, and running the practice session and tournament. During the tournament, the teacher provides individual assistance to students who appear to need it. In the second application, the teacher follows the manual directions but uses worksheets and games developed by the center.

The student in the TGT classroom becomes an active participant in the learning process. In team practice sessions, students cooperate in studying the material that will be presented in the tournament. High-achieving students tutor low-achieving students on their team. Following the practice, each student from the team competes against students from other teams of equal ability in the tournament. Students then take points back to their teams, depending on how well they did in the tournament. Because of the equal-ability aspect of the tournament, low-ability students have the potential to get as many points as high-ability students for their teams.

SUBJECT AREA(S)

TGT can be used in all subject areas that require the learning of information or basic skills. It can be used in: language arts (vocabulary, analogies, capitalization, punctuation, sentence structure, and parts of speech); mathematics (basic math, algebra, geometry, and metric education); science (biological processes, astronomy, and ecology); social studies (identification of other countries, States and their products, and organization of government); and industrial arts (tool identification and work processes).

INTENDED USERS AND BENEFICIARIES

TGT is used by teachers as an instructional process; the process is used with students in grades 3-12. Curriculum unit games are not available from the Center for all possible applications, but are available for language arts (grades 3-4 and 6-9), mathematics (grades 5-7 and 11), science (grades 7-8), and industrial arts (grades 11-12). These unit games are all teacher developed.

Nontarget population users of TGT would include all other teachers who work with students in a classroom setting; for example, teachers of dyslexic children and teachers of the handicapped or behaviorally disruptive children. The Mark Twain School in Rockville, Maryland, which is a school for "behavior problem" children, has reported considerable success using TGT.

GOAL(S) OR PURPOSE(S)

The goals of TGT are: (1) To improve student learning of basic skills, (2) to promote positive student attitudes toward schoolwork and classroom experiences, and (3) to increase the incidence of cooperation (peer tutoring) among students in the classroom.

PATTERNS OF USE

TGT is designed to be used complementarily with traditional teacher methods (lecture and drill), with individualized instruction, or with criterion-referenced (performance-based) learning. TGT is in no way a complex replacement for these techniques, but is a way to supplement them. Units may supplement any language arts, social studies, mathematics, or science course; several units could be combined for a semester or full-year course.

The TGT instructional process is carefully sequenced for best results on academic achievement, but the individual teacher may adapt and change elements to meet specific objectives. Teachers have allowed students to choose their own teams; they have made and used various types of instructional games or used commercial games; and they have changed the structure for allocating points. All these variations have produced positive results similar to those using the structured process.

ASSESSMENT PROVISIONS

No assessment program is provided. It is suggested that teachers use prior test results as the criterion for placing students on teams according to achievement level. Pretest/posttest is used by most teachers to determine the academic effects of using the unit; teacher observation will determine the incidence of peer tutoring and student interaction.

TIME REQUIREMENTS

A TGT curriculum unit is intended to be used in each class period over a 6- to 8-week period. The unit interacts with traditional or other instructional methods taking place during that time.

A short unit based on only a few learning objectives may be used in a 3- to 4-week period.

IMPLEMENTATION PROCEDURES

TGT requires no special equipment, facilities, services, or organizational changes. Implementing TGT does require that the teacher devote time to the preparation and reproduction of materials. Two strategies for counteracting this problem are: (1) The provision of curriculum units by the center, relieving teachers of the game-making process, and (2) the suggestion that teachers get student help in duplicating materials.

Summary Cost Information

The cost of TGT depends upon the extent to which the teachers wish to prepare their own materials. The basic cost is $3 for the manual, from which teachers can then prepare games, worksheets, and scoresheets by using the school duplication facilities.

For adopting TGT at the school or district level, the center provides workshop training on an actual-expense-plus-consultant-fee basis. TGT consultants are available from the Center and various other locations. Generally, workshop training and some experience with TGT qualify district personnel and teachers to run their own workshops.

ASSURANCES AND CLAIMS

Assurances of Harmlessness

In the developmental classroom experiments, participating teachers have reported no evidence of potential harm.

Assurances of Social Fairness

TGT does not perpetuate sexism, racism, or other biases. The TGT manual is written to the teacher, using the "you" designation and thereby avoids the problem of generic pronouns. However, the generic "he" is used in a few places to refer to students collectively. This will be corrected in future published editions.

Assurances of Replicability or Transportability

The TGT process was used successfully by 27 of 32 classroom teachers who implemented TGT using only the teacher's manual with no correspondence or assistance from the Center. These teachers made various adaptations to meet their special needs.

Claims of Effectiveness

1. Increased academic achievement—Nine classroom implementations of TGT have been conducted in mathematics (7th grade), social studies (7th grade and 10th through 12th grades), language arts (3d grade), and reading (3d grade). In all implementations but one (7th-grade social studies), TGT produced significant positive effects on student academic achievement in comparison to a control group. These studies included a total of 1,091 students. The measures of achievement used in the studies included the computations subtest of the Stanford Achievement Test in mathematics; a specific subject-matter subtest derived from the SAT in math; a divergent solutions test devised by the authors; a three-part social studies achievement test of basic skills, devised by the authors; a treatment-specific six-question social studies test; the SCAT-STEP, version II, social studies subtest; a treatment-specific test of language arts skills, devised by the teacher and authors; and the Hoyum-Sanders Elementary English Test.

2. Increased positive student attitudes toward classroom—In the nine implementations of TGT, analyses revealed that, compared to a control group, four of the implementations produced increased positive student attitudes toward class (e.g., interest in class, satisfaction with class); three produced no differences in attitudes for the TGT and control groups; and attitudes were not measured in the other two implementations.

The measures of student attitudes used in the studies were on an attitudes-toward-American-history-scale, devised by the authors; an attitudes-toward-class (Likert-type) measure devised by the authors; satisfaction, apathy, competition, and cohesiveness scales derived from the Learning Environment Inventory (Anderson and Walberg, 1972).

3. Increased peer tutoring and mutual concern—Peer tutoring and mutual concern of students were not measured in three of the nine studies. In the other six, all but one (social studies, 7th grade) showed that TGT had significant positive effects on peer tutoring and mutual concern. The measures used were sociometric items in a questionnaire devised by the authors; student behavior scale; class activities questionnaire; competition, cohesiveness, and mutual concern scales from the LEI; a normative climate measure; and a frequency-of-tutoring measure devised by the authors.

Claims of Social Fairness

The organization of teams in TGT specifies that the teams should be heterogeneous in race and sex. Thus, the teams provide a cooperative environment in which students of different sex and race work together and encourage each other academically. They are also mutually dependent for their classroom grade, as they are graded as a group and not individually.

Claims of Careful Product Development

During the developmental process, various research studies have examined the elements of TGT separately and as a whole. Effects have been reported for the games aspect and the group-reward aspects. Variations of the technique have been examined, such as basing group rewards on the performance of low achievers rather than on the average performance of the whole group. Because all TGT development was carried out through classroom experimentation, the participating teachers contributed greatly to the end result. Following the carefully controlled experiments, the preliminary user's manual was sent to more than 200 teachers and educational personnel with the request that they evaluate the manual itself and make suggestions for improving it, and that they implement TGT, using the manual and make suggestions for improving TGT.

Feedback from these teachers resulted in a revised, more concise manual and specific ideas for improving the TGT instructional process to meet specific needs of the teachers.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Teacher's manual	1 per teacher	3.00	Reusable	
Supplemental items:				
Sample kit, including manual sample, games worksheets, scoresheets, table markers, etc.	1 per teacher	25.00	Reusable	
Specific curriculum unit set including manual, games for specific objectives, worksheets, scoresheets, table markers, etc.	1 per teacher	To be announced	Reusable	

DEVELOPER/AUTHOR:

Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

David DeVries, Project Director
Keith Edwards, Project Codirector

AVAILABILITY

The following are currently available: TGT teacher's manual; TGT curriculum language arts units (grades 3, 4, 7, and 9); and TGT sample games for mathematics (grades 5, 6, 7, and 11), science (grades 7 and 8), and industrial arts (grades 11 and 12).

The continued development of the following products depends upon securing funds: TGT math curriculum (grades 7 and 8), TGT metric curriculum unit, and further field testing of TGT language arts curriculum units.

The TGT teacher's manual is under developmental copyright, which expires March 15, 1975. Authorization to seek publication of various TGT curriculum units is now being applied for in order to place these materials under developmental copyright and extend the developmental copyright period of the manual.

Future plans for the product depend upon which development and disseminating activities will be funded. The Center will provide manuals, sample kits, and workshop training, and will continue developmental activities as much as possible. A commercial publisher, who will assist in further development, graphics, and packaging of TGT curriculum units, is currently being sought.

The product is available in its present state from:
Center for Social Organization of Schools
Johns Hopkins University
3505 North Charles St.
Baltimore, Md. 21218

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 017

TRAINING MATERIALS FOR THE PERSONAL ASSESSMENT FEEDBACK SYSTEM–PART OF THE COMPREHENSIVE ASSESSMENT SYSTEM (COMPASS) DEVELOPED FOR THE PERSONALIZED TEACHER EDUCATION PROGRAM (PTEP)

Technique-training materials for counseling psychologists in teacher education programs to train others in personal assessment feedback counseling

Training Material for the Personal Assessment Feedback System is designed for an audience of counseling psychologists affiliated with teacher education programs.

The system provides orientation, training, and consultation services to enable the audience: (1) To install and administer the Center's *Comprehensive Personal Assessment System*, a battery of 10 personal assessment instruments accompanied by scoring and interpretation manuals, and computer scoring and report programs; (2) to produce comprehensive and reliable analyses of the assessment data from the battery in a form that is communicable, comprehensive, and constructive to the student; (3) to engage productively in feedback counseling and consultation contacts with students based, in part, on the assessment data and its refinement, updating, and verification through succeeding contacts; (4) to engage in effective communication with other faculty members who instruct or supervise students toward the end of assisting faculty to personalize that part of the program for which they are responsible; and (5) to serve as a second-generation trainer and consultant to other institutions interested in adopting the *Personal Assessment Feedback* (PAF) component.

Training materials for the PAF component include manuals on use of the assessment instruments and how to synthesize their data for feedback, manuals detailing the theory and process of feedback, supplementary case and training materials, and protocol films that model the counselor behaviors discussed in the manuals and in workshop sessions. The training process usually includes a group workshop experience followed by continuing one-to-one contacts focusing on developmental problem solving. Alternately, when advanced students are trained, the workshop may be extended over an academic semester.

SUBJECT AREA(S)

The subject areas include evaluation, teacher training, and counseling.

INTENDED USERS AND BENEFICIARIES

The training materials for the PAF system are intended for use in teacher training institutions. The trainer's guide is used by counseling psychologists to train counselors of student teachers. Manuals for the PAF system are used by these counselors in interpreting the instruments completed by student teachers.

GOAL(S) OR PURPOSE(S)

The goal of the training materials is to prepare resident counseling or clinical psychologists in teacher education programs adopting components of the *Personalized Teacher Education Program* (PTEP), including the *Comprehensive Personal Assessment System* (COMPASS), to train other psychologists or advanced counseling students to install and conduct personal assessment feedback counseling.

One goal of the assessment feedback system is to enable the counselor and, to appropriate degrees, the staff of a teacher education program to know the students as unique persons and to tailor experiences in the program to fit individual needs and talents. An equally important goal is that of facilitating clearer understanding by the students of their own characteristics and interactional style as these are directly relevant to their potentiality for (and satisfaction with) their impact as teachers.

PATTERNS OF USE

The adoption of one or more components of a comprehensive training system like PTEP is a process, not an event. The component must become an element in an ongoing training program that must continue to function during adoption if the materials are not to become a dysfunctional appendage or an active disrupter of the ongoing program.

The training material for the PAF, if effectively used, serves as a catalyst for further changes in the ongoing training program. A second PTEP component may be offered and accepted as a means of bringing another aspect of the ongoing program into conceptual, operational, and goal-directional consistency with the change taking place through use of the earlier adopted component. Thus, PTEP is not adopted as a whole, but rather through the sequential adoption of components, of which this product is one.

These training components for teacher educators are selected to assist them to master the role functions required to "deliver" a PTEP program component as designed and intended.

The "training" of a target audience of teacher educators, crucial in any significant and sustained change in college-based teacher education, requires an approach specifically tailored to it. Therefore, a collaborative relationship is emphasized, rather than a didactic-instructional stance. The training materials were developed, however, specifically to minimize the amount of continuing interaction required between developers and adopters.

ASSESSMENT PROVISIONS

Assessment provisions for the assessment feedback component of the PTEP are an integral part of that component, namely the COMPASS battery. Additional assessment systems are available for monitoring and evaluating program effects (such as assessment and coding of classroom interaction, and supervisor and pupil evaluations of student teachers).

TIME REQUIREMENTS

Assuming adequate prior preparation and experience in general assessment and counseling, counselors in training for assessment feedback in teacher preparation programs have been adequately trained to commence using the COMPASS and recommended feedback and follow-through procedures in a 5-day intensive workshop. Optimally, trainees require approximately 8 hours of reading and study time prior to the workshop and 8 hours for further reading and analytic and report writing practice following the workshop. Additional time for supervision and consultation with the trainer during the trainee's early experience in implementing the system with students is highly desirable.

In situations in which graduate students are being trained to offer feedback, equivalent training with the same materials can be offered (usually in connection with an assessment or practicum course) over an academic semester.

When the system is operationalized, for each student teacher attending a PAF counseling session, the professional time of one counselor will be used for approximately 1 hour for preparation and 1-1/2 hours for feedback. Optimally, the counselor will also be available throughout the semester to consult with students and faculty team members. Two hours of student-teacher time will be spent in completing the assessment instruments, and 1 hour will be spent in each counseling session.

IMPLEMENTATION PROCEDURES

The main requirement for the 5-day training workshop is the clearing of 5 full days of uninterrupted time for trainer and trainees. A retreat setting is highly desirable since work and discussion almost always continue into the evening.

Implementation of the assessment feedback system in an ongoing program requires: (1) Installing and administering the COMPASS system; (2) providing space, time, and regularized procedures for administering the battery to all students included in the pilot phase of implementation and for scheduling and conducting feedback interviews; (3) establishing secure data storage and access facilities and policies; (4) orienting students and faculty to the purposes of the assessment feedback experience; (5) establishing necessary computer programs for test scoring; and (6) involving faculty in program development alternatives which are catalyzed by the introduction of this individualizing/personalizing component.

Personnel Required for Product Adoption and Implementation

Personnel required for the training workshop include one counseling psychologist and the counselors-in-training.

Personnel required for implementing the system after training is completed include the following: (1) Sufficient counselors to fulfill data analysis and feedback requirements imposed by the number of students initially offered the feedback experiences—optimally, additional counselor time for consultation with faculty regarding individual students and program planning is desired; (2) one psychometrist or assistant to administer and manage data collection, storage, and scoring procedures; and (3) students undergoing the assessment feedback experience.

ASSURANCES AND CLAIMS

While the concept and operationalization of PAF counseling has received considerable testing and revision since 1962, the training component for PAF is a more recent product. The training component consists of six manuals on the assessment instruments and their interpretation, a manual on conducting PAF, six 16mm color films on the role of the counselor in a teacher training program and on modeling specific aspects of the counseling process, a 1-hour-long video tape of a complete model PAF session, a trainer's guide, and supplementary training materials.

The complete package has been used for counselor training since fall 1973 in 4 institutions with a total of 55 counselors during 8 workshop sessions. Prior to this, components of the total training package were tested with some 30 counselors at 5 other institutions. Formative evaluation forms were completed by all workshop participants, and the training procedures have been slightly revised based on this feedback. The feedback received, however, was extremely positive and there were relatively few recommendations for change. Subsequent consultative interaction with most workshop graduates who have implemented the program strongly affirms the adequacy of the materials in preparing counselors to engage effectively both in assessment feedback per se and in their emerging role with related teacher education faculty.

Training materials from the package have been used by three institutions for second-generation training activities.

Evidence of the effectiveness of the the PTEP program as a whole, and of the PAF component alone, at both formative and summative levels has been gathered over many years. This evidence is extensive and extremely complex. The full reports of the major studies in this area are listed below and are available at the Center:

1. *The Evaluation of Personalized Teacher Education: Final Report to the National Institute of Education*, by G. D. Borich, et al., University of Texas, Research and Development Center for Teacher Education, Austin, Texas (1974).

2. *Impact of Personalized Teacher Education on Students and Faculty*, by G. G. Brown and S. L. Menaker, University of Texas, Research and Development Center for Teacher Education, Austin, Texas (1970).

3. *Effects of Personalized Feedback During Teacher Preparation of Teacher Personality and Teaching Behavior: Final Report to the U.S. Office of Education*, Report Series No. 1074, ERIC No. ED 038 148, by F. F. Fuller, et al. University of Texas, Research and Development Center for Teacher Education, Austin, Texas (1969).

4. *The Course of Treatment in the Personalized Teacher Education Program*, by R. A. Haak, University of Texas Research and Development Center for Teacher Education, Austin, Texas (1973).

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Trainer's guide for conducting a comprehensive training program in *Personal Assessment Feedback* counseling and supplementary training materials Materials	1 for counseling psychologist trainer	6.00	Reusable	
Counseling report manual	1 per trainee	4.50 each	Reusable	
Personal Assessment Feedback counseling for teachers	1 for trainer	2.50	Reusable	
Comprehensive Personal Assessment System Scoring programs Manuals for instruments Clinical interpretations of instruments	1 of each for trainer only	18.00	Reusable	
Information for students about the *Comprehensive Personal Assessment System* in the teacher education program	1 per student	.50 each	Reusable	
Complete set of COMPASS instruments	1 per student	24.30 per 100	Consumable	

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

Oliver H. Brown, Project Director
Gene E. Hall, Adoption Agent Training
Beulah Newlove, Counseling Expert
David A. Wilson, Communications

AVAILABILITY

Developmental copyright has been claimed for all materials produced in support of the PTEP. None in the assessment feedback component have been commercially published under copyright. All components of this product are currently available from:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 018

TRAINING MATERIALS FOR THE PERSONALIZED VIDEOTAPE FEEDBACK SYSTEM

Materials to help teacher training staff personalize and increase the impact of the feedback given to students

Training in Personalized Videotape Feedback is designed for an audience of both counseling psychologists and supervisory personnel affiliated with teacher training programs. The system provides orientation, training, and consultation to enable them:

1. To provide resources and opportunities for students to be video taped while teaching in either a laboratory or public school setting, preferably several times during training;
2. To engage in effective, arousing feedback interaction with the student based on the video taped behavior sample;
3. To engage in effective follow-through instruction or consultation based on learning needs of the students as identified or clarified during PVTF interaction;
4. To serve as training and consultation resources for other institutions interested in adopting PVTF.

Training materials for the PVTF component include manuals on the feedback process with particular emphasis on the implications of research into the effects and mechanisms of self-confronatation counseling, films of video tape feedback sessions, and manuals on how to make nonintrusive video tapes in classrooms. The training process usually involves a group workshop followed by one-to-one consultation dealing with specific issues of installation and procedure at individual institutions.

SUBJECT AREA(S)

The subject area is teacher training.

INTENDED USERS AND BENEFICIARIES

The PVTF system is designed to be used by both counseling psychologists and supervisory personnel associated with teacher training programs. The chief beneficiaries are student teachers and their pupils.

GOAL(S) OR PURPOSE(S)

The goal of the training materials is to prepare psychologists and curriculum, methods, and field experience supervisors to personalize and increase the impact of their feedback to teachers-in-training. Most individuals in the target audience are provided some form of supervisory feedback prior to training. The training is most appropriate to, and desired by, teacher educators concerned with personal and professional development of the teacher in addition to specific skill training. The training is directed toward video tape feedback but can be generalized to feedback practices in laboratory situations and real classrooms which are audiotaped or observed by the supervisor offering feedback.

The goal of the PVTF system after implementation is the nonthreatening and effective use of video tape feedback to make the preservice teachers more aware of their own teaching styles and techniques of interaction with students. A firm research base and techniques from both counseling and teacher education are integrated to achieve this end.

PATTERNS OF USE

The materials have been tested only by Center staff conducting workshops with faculty groups from several teacher training institutions. The pattern of use may not be identical with that adopted in institutions using the training system. The trainer's guide is oriented toward a 1-day intensive workshop. An array of reading materials is provided for preworkshop preparation and postworkshop self-study. If training is followed by implementation of the system with teachers, consultation with colleagues similarly engaged in video feedback is encouraged and almost always occurs. With resident trainers, the 1-day workshop format is easily adaptable to shorter periods of contact over a longer time frame.

ASSESSMENT PROVISIONS

The training materials have been pilot tested at a national conference (ASCD) workshop and with several groups of teacher educators from collaborating institutions. Feedback on the training experience has been systematically solicited to guide development and refinement, but no formal assessment procedures have been developed.

TIME REQUIREMENTS

A 1-day intensive workshop has been the primary training vehicle employed to date. Approximately 8 hours of reading time before and following the workshop is recommended for participants.

When PVTF is implemented in an institution, the time of one or two faculty members (two if a counselor and curriculum supervisor work together) will be used for 1 to 1-1/2 hours with each student receiving feedback each time PVTF is given. Approximately 1 hour of student time and video taping time is required to make the tape.

IMPLEMENTATION PROCEDURES

The training materials are complete and self-contained for the workshop and recommended reading. One full day is required for trainer and trainees in a workshop setting.

The implementation of PVTF in an ongoing training program requires:

1. Minimally obtrusive video taping capability in (preferably) naturalistic settings in which teachers or teachers-in-training are teaching;
2. Development of adequate orientation procedures to place the PVTF experience in meaningful context with other ongoing facets of the student's (or teacher's) training experience and to inform the user of arrangements for video taping and feedback conferences;
3. Video tape playback equipment in a private office or conference room for the conduct of the feedback.

When the system is implemented, video taping and playback equipment is required. Faculty and student time for feedback conferences must be scheduled.

ASSURANCES AND CLAIMS

All parts of the training materials have been pilot tested and revised on the basis of trainee reaction and observed impact. Because of the phaseout of the institutional network shortly after the materials were completed, no field tests or formal evaluation studies have been possible. One collaborating institution has used the materials for "second generation" training purposes. Informal reports of the impact of training have been positive with respect to degree of impact on subsequent practice.

The effects of PVTF as a single component of the PTEP and as it contributes to the total system and its impact have been studied extensively. Research and evaluation evidence of the effects of the PTEP, in comparison with conventional programs, is summarized in the accompanying product description, *Training Materials for the Assessment Feedback System*.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Trainer's manual for personalizing video tape feedback	1 for trainer	3.00	Reusable	
Counseling teachers using video feedback of their teaching behavior (and supplement)	1 for each trainee; 1 for trainer	3.00	Reusable	
7 other articles, guides, and literature reviews on video tape feedback (see "Subject areas")	1 or more copies of each to be available to trainer and trainees	7.50	Reusable	

Note: When the system is implemented, video taping and playback equipment is required. Faculty and student time for feedback conferences must be scheduled.

DEVELOPER/AUTHOR:

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

Oliver H. Bown, Project Director
Gene E. Hall, Adoption Agent Training
Beulah Newlove, Counseling Expert
David A. Wilson, Communications

AVAILABILITY

***Personalized Video Tape Feedback System* is under developmental copyright. Materials for implementing the program are currently available from:**

Research and Development Center for Teacher Education
University of Texas at Austin
Education Annex 3.203
Austin, Tex. 78712

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 019

ASSESSING AND INFLUENCING BEHAVIOR: A SELF-INSTRUCTIONAL TEACHER TRAINING PROGRAM

A self-instructional program to train teachers to measure and change student behavior

This is a self-instructional program designed to train teachers to measure and record individual student behavior, enabling the trainees to then assess their own instructional techniques. Trainees are also taught to specify and communicate precise behavioral goals, and to systematically influence and change student behavior through the use of positive consequences. The program is designed for inservice teachers (preschool through high school) and other persons in the field of education who have access to an ongoing classroom.

Contained within a single workbook, the program consists of four units, each of which has certain behavioral objectives. In each unit, textual material is followed by exercises which give practice in the competencies outlined by the objectives. Applied classroom exercises are included which are designed to enhance trainees' insight into the principles taught by the program. Immediate feedback is provided for most exercises. It is recommended that the program be implemented by a coordinator. This can be a teacher who has had previous experience with the program. A coordinator's manual and a list of suggested readings are included.

SUBJECT AREA(S)

The program trains teachers to measure and change student behavior. It consists of four self-instructional units whose titles and page lengths are as follow:

I. Influencing Behavior (19 pages)
II. Measuring Behavior (126 pages)
III. Specifying Behavioral Goals (22 pages)
IV. Techniques for Influencing Behavior (81 pages)

INTENDED USERS AND BENEFICIARIES

Any inservice teacher (preschool through high school) or educator who works with teachers (e.g., administrators, school psychologists or social workers, and student teachers) and who has access to an ongoing classroom, could be a user of the program. Classroom students will be the chief beneficiaries of the program since participating educators will be better able to assess individual student performance and to develop in students positive academic and social behaviors.

GOAL(S) OR PURPOSE(S)

The trainee successfully completing the program will be able: (1) To operationally define behavior; (2) to measure, record, and graph behavior; (3) to specify and communicate clear behavioral goals; (4) to assess individual student performance; (5) to assess teaching strategies; (6) to use teaching strategies employing positive consequences for the purpose of developing and maintaining desired student behaviors; and (7) to decrease undesirable student behaviors and substitute appropriate student behaviors.

PATTERNS OF USE

The program should be used by educators who have access to an ongoing classroom, so that they can take advantage of the applied exercises. The program could be offered as part of a college or university course for inservice educators or it could be used by a group of teachers within a school. Trainees should proceed in order through units I-IV, since activities in later units build upon previously learned skills.

ASSESSMENT PROVISIONS

The program text incorporates periodic self-monitored exercises which provide immediate feedback to the learner. In addition, self-assessment questionnaires are included, which trainees are encouraged to discuss with the coordinator and other trainees.

TIME REQUIREMENTS

Because the program is individualized, time requirements will vary. A pilot study of the materials suggests that the range for completion be 10 to 15 weeks.

IMPLEMENTATION PROCEDURES

The program, presented in workbook form, provides all the necessary materials for trainee self-teaching. While trainees can proceed at their own pace, it is suggested that once per week they meet with the coordinator for the purpose of discussing issues and problems and sharing information related to applied exercises.

Personnel Required for Product Adoption and Implementation

It is recommended that a coordinator be available for weekly consultation by users of the program. This should be a person who has familiarity with behavioral assessment and influence procedures either through previous use of the program or other relevant experience, such as workshops or study related to the principles of learning.

ASSURANCES AND CLAIMS

Careful scrutiny by the developers indicates that the program does not appear to contain any form of social or sexual bias and that the materials should be usable by all ethnic groups. In a pilot study conducted with an economically and racially mixed population, the training materials have elicited no critical comments with regard to bias; and there is no evidence of any harmful effects of the training materials, either to the trainees or to their students. Assurances of transportability are not possible at this time. The program has been used with 16 students in a course in human learning under the supervision of the developer.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Assessing and Influencing Behavior: A Self-Instructional Teacher Training Program (1 volume)	1 per student	To be announced	Reusable as a reference tool	
Coordinator's manual	1 per coordinator	To be announced		

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Roger D. Klein, Research Associate
Marcia B. Brissett, Research Assistant

AVAILABILITY

An inhouse version of the program is available from:
Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

DESIGN AND DEVELOPMENT OF CURRICULAR MATERIALS

A course to teach methods and techniques for designing and implementing individualized curriculum materials

This is a self-instructional course in individualized curriculum design. It is intended to teach the methods and techniques of designing and implementing individualized curriculums for individuals who will hold major positions in curriculum development in a variety of professional settings. This curriculum design course is based on the Process Individualization Curriculum (PIC) model developed at the Learning Research and Development Center.

The PIC model for curriculum design incorporates content, concept, and component analysis procedures, with emphasis on: Instructional theory, learning-to-learn skills, criterion-referenced testing, and research-based instructional strategies. There are 12 units, each of which begins with a rationale which explains the relationship of the unit to the complete course. Included are a charter hierarchy of behavioral objectives, study guides, reference sources, and posttests to evaluate mastery of the terminal objectives of each unit. An instructor's manual is also included which provides suggestions for using the self-instructional units, either in a classroom situation or in an independent study situation with infrequent oncampus interaction sessions.

SUBJECT AREA(S)

Twelve self-instructional units comprise the comprehensive course in creating adaptive individualized instruction. The titles and page lengths of the units are as follows:

Background To Instructional Design

Introduction (4 pages)
I. Goals of Education (34 pages)
II. Psychological Bases of Instruction (55 pages)

Theoretical Rationale for Instructional Design

III. The Subject Matter (106 pages)
IV. The Skills (58 pages)
V. The Instruction (130 pages)
VI. Evaluation (112 pages)
VII. School Administration and Inservice Training (38 pages)

Applied Instructional Design

VIII. Design Procedures (71 pages)
IX. The Objectives (52 pages)
X. Criterion-Referenced Test Construction (71 pages)
XI. Lesson Writing (53 pages)
XII. Management System Design (87 pages)
Glossary (4 pages)
Instructor's Manual (62 pages)

INTENDED USERS AND BENEFICIARIES

The range of potential users is extremely broad. Those who completed the course and reported that it met their needs include: Teachers, school administrators, industrial training supervisors, community college professors, university instructors, nursing school instructors, directors, librarians, reading specialists, school psychologists, teachers of the blind, teachers of retarded children, and a director of an alternate school for dropouts. Thus, it is intended for anyone who teaches or supervises, or works with teachers, especially curriculum specialists and members of curriculum teams.

Other potential users are: Research and development centers for staff training, inservice teacher training institutes, university extramural postbaccalaureate programs, and graduate education programs of curriculum specialists.

The ultimate beneficiaries are the students who will benefit from teachers' increased abilities to individualize curriculum materials, as well as the students who use the actual curriculum materials, developed by the course trainees.

GOAL(S) OR PURPOSE(S)

The student successfully completing this training product will be able: (1) To select instructional goals; (2) to specify appropriate instructional methods, media strategies, and classroom environment; (3) to write tests based on a given curriculum hierarachy; and (4) to write individualized instructional materials.

PATTERNS OF USE

This self-study course may be given either oncampus or offcampus. The introduction describes each component of the course: Rationale, hierarchy, study guides with tasks and sources for the tasks, overview, articles, bibliography, posttest, and answer keys for study guides and posttests. Students receive a substantial amount of feedback from instructors on their curriculum products—whether the instructor meets with the students to evaluate their work or whether the work is sent to the teacher to be evaluated.

Units may be mastered in any order, depending on the background of the student. Students taking this course would begin with unit I and proceed through unit XII. However, there are 2 reasons for choosing to study fewer than 12 units: (1) Prior mastery of the objectives of any given unit; and (2) the specific needs of the student, such as the desire to learn more about testing and evaluation, administrative theory, inservice teacher training, and management system design. Thus, it would be appropriate to study units VI, VII, X, and XII.

ASSESSMENT PROVISIONS

A pretest is provided to determine a student's degree of knowledge prior to taking the course. Posttests are contained at the end of each unit, enabling students to determine whether they have mastered the concepts and skills and achieved the required terminal behavior of the unit. The students must satisfy both the concept and skill objectives and the terminal behavioral objective demonstrated by their response. Both pretests and posttests for the course are coded so that they can be divided into trimester blocks. The unit posttests may be self-monitored. The tests were found to be very helpful in pointing out to students their area of greatest weakness and strength and in making it possible for them to concentrate their efforts where most needed.

TIME REQUIREMENTS

Since this training product is individualized, time completion will vary. Students at the University of Pittsburgh who study all the units usually complete the course during three trimesters.

IMPLEMENTATION PROCEDURES

Although this product is primarily self-instructional, trainees need to receive detailed, positive, explanatory feedback from instructors who have extensive knowledge and experience in the design and development of curricular materials. To take advantage of the individualized nature of the product, instructors may need to change from group lecture to individual tutorial sessions.

Personnel Required for Product Adoption and Implementation

One instructor who has extensive knowledge and experience in the design and development of curricular materials can handle many students for the first four units since there is only one pretest for evaluation. For part 2 (units 5-8), instructor feedback is required on three posttests. Even greater instructor time is needed for evaluation and feedback for part 3 (units 9-12), which requires the development of a curriculum. In field testing, 70 students scattered throughout the 3 portions of the course were handled easily by 1 instructor on a 20-percent workload basis. Pretests and posttests are objective and can be handled by monitors or graduate assistants.

ASSURANCES AND CLAIMS

Assurances

This product (including earlier versions) has been used with approximately 250 trainees under the guidance of 2 instructors. Some of these courses have been conducted without active participation by the product developer. Thus it is clear that the course is transportable. However, an analysis of product use by two different instructors indicated the need for the instructor to give extensive positive explanatory feedback to the trainee. The instructor's manual now emphasizes this need. When the product was used without appropriate feedback, there was a high student dropout rate. This may have been detrimental by discouraging students from further study on curriculum materials, design, and development. However, the producer has no evidence that the students who did not receive this appropriate feedback changed their interests after their course experience or that any other students suffered any harmful effects.

The materials do not appear to display any form of social bias, including ethnic or sexual stereotyping (except for occasional use of the generic "he"). This assurance is based on an examination of the materials themselves and on the adaptive ways in which they may be used in order to accommodate to the special needs, interests, or goals of ethnic minorities, as well as the requirements of indivudual students.

Claims

A product-oriented curriculum in which mastery is measured by ability to produce comprehensive instructional systems can only be evaluated by the quality of the products produced and the growth of the students from neophytes in curriculum design to designers and developers of effective curriculum components.

There were major gains in posttest scores of the field test students on the criterion-referenced measures. During the unit field test, assessments of attitudes of students who received the appropriate instructor feedback generally resulted in "average" to "very good" ratings on items such as "subject matter relevancy to your own interests," "instructional value of tests and exercises," and "clarity of objectives." Many of the trainees were so enthusiastic about the course that they continued on to advanced academic work in curriculum design and recommended the course to others. The quality of the products produced by the trainees is impressive. Many of these trainee products have been adopted by school districts and other organizations and are already in active use. They, too, have positive impact on students. The credibility of this evidence, based on adequate instrumentation and appropriate indicators, appears solid; however, since the evaluations were performed and analyzed by the producer, the results may not be highly objective.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Design and Development of Curricular Materials (3 volumes)	1 set per student	To be announced	Reusable as a reference tool	
Instructor's manual	1 per instructor	To be announced	Reusable	
(4) paperback books (optional)	1 per student		Reusable	
Benjamin S. Bloom, Editor, *Taxonomy of Educational Objectives, Handbook I, Cognitive Domain*, 1956		2.95		David McKay Co., New York, N.Y.
David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masis, *Taxonomy of Educational Objectives, Handbook II Affective Domain*, 1964		2.95		David McKay Co., New York, N.Y.
M. David Merrill, *Instructional Design: Readings*, 1971		5.95		Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632
Robert F. Mager, *Preparing Instructional Objectives*, 1962		2.25		Fearon Publishers, Belmont, Calif.

DEVELOPER/AUTHOR:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

Doris T. Gow, Project Director

AVAILABILITY

Copyright for *Design and Development of Curricular Materials* is pending. It will be available in spring 1975 from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 021

INDIVIDUALLY GUIDED MOTIVATION (IGM) (PART OF THE INDIVIDUALLY GUIDED MOTIVATION SYSTEM)

A system to enable teachers to relate instruction
to specific curriculum areas and attain
motivational objectives

Individually Guided Motivation (IGM) is a motivational-instructional system intended to provide teachers with knowledge and skills with which to help their students become more responsible and self-directed in learning and conduct. Multimedia instructional materials and an inservice program are designed to train practicing and potential teachers to apply key motivational principles within the context of specific motivational-instructional procedures. IGM thus serves as the focused effort of a school to deal with motivation; it enables teachers to relate, in systematic fashion, instruction in specific curriculum areas and attainment of motivational objectives.

Four independent motivational-instructional procedures have been developed. Each of the procedures incorporates, as appropriate, key motivational principles and related teacher behaviors: Focusing student attention on desired objectives, providing models to observe and imitate, helping set educational goals, providing feedback reinforcing desired behaviors, and reasoning about prosocial behavior and values.

One or more of the following four procedures may be used flexibly in each child's motivational program: (1) Adult-child conferences to encourage independent reading are conducted by a teacher or an adult aide as part of the instructional program in reading; (2) teacher-child conferences for goal setting enable children to set and attain realistic goals in specific curriculum areas such as mathematics or science; (3) guiding older children in tutoring younger children is designed to help the tutored child to achieve specific instructional objectives or to work on independent projects—tutors may also be high school or college students or noncertified adults; (4) small-group conferences to encourage self-directed prosocial behavior are conducted by the teacher as part of the regular curriculum, such as social studies or language arts, and are intended to increase self-direction and promote those behaviors that contribute to self-realization and good citizenship.

The IGM system and the four procedures composing it are described in a single six-chapter text. The text presents an overview of IGM and explains the motivational principles and related behaviors underlying the system, describes in detail each of the four procedures, and provides a background for the IGM system by surveying relevant motivational theories and research. Five films correspond to the first five chapters of the text: An overview film describes the entire IGM system and the four procedures; each of the remaining films describes and demonstrates in actual school use one of the four IGM procedures. Four additional books are designed for specialized use by teachers, aides, tutors, and those participating in college-level and inservice education.

SUBJECT AREA(S)

The IGM system can be incorporated into a variety of curriculum areas; e.g., reading, social studies, language arts, math, and science, depending on which IGM procedure is being implemented and on the needs of the student.

INTENDED USERS AND BENEFICIARIES

IGM was developed according to the Individually Guided Education (IGE) model of instructional programing for the individual student, but it can be implemented in either IGE or non-IGE schools.

Sets of multimedia instructional materials have been designed and developed to help beginning and experienced elementary and middle school teachers to understand and to use motivational principles, skills, and procedures so that they will be able to initiate and maintain a workable motivational program, systematically and within regular school curriculum areas. Prospective teachers are also a target group for training in IGM procedures; a manual has been developed to aid the college instructor in teaching effective use of IGM materials. Additional materials have been developed for student tutors, aides, and noncertified adults who do not ordinarily receive complete IGM inservice education. Ultimately, of course, the beneficiaries are the students who can develop self-direction in learning and conduct.

GOAL(S) OR PURPOSE(S)

Teachers typically must cope with motivational problems by either a variety of piecemeal techniques, often sporadically applied, or recourse to specialized personnel. IGM's primary objective is to provide teachers with a systematic, flexible program within which student initiative and responsibility for learning and conduct can be developed and maintained. An additional goal of the program is to provide teachers with a knowledge of motivational principles and skills which is not restricted solely to use in specific IGM procedures, but which can be applied more generally in many school situations.

PATTERNS OF USE

The IGM system calls for school-wide cooperative effort to identify general motivational objectives for all children in a particular school. Objectives are then identified for smaller groups of children, and each student's motivational level is assessed with regard to the objectives. Next, a motivational program, using one or more of the four procedures and based on each child's present level of motivation, achievement, and self-direction, is planned and carried out for each student. The procedures may be used in any pattern or combination, as the children's needs demand and school resources permit. The motivational program is intended to be incorporated into each child's regular instructional program.

ASSESSMENT PROVISIONS

Formalized assessment procedures, including checklists, observations, and interviews, have been developed and incorporated into the four motivational-instructional procedures composing the IGM system. In general, children are preassessed, using either formalized methods or more informal ones, to determine whether they could benefit from a specific procedure. Guidelines and materials for continued assessment are also provided to aid in monitoring each child's motivational progress.

TIME REQUIREMENTS

Time required to implement the full IGM system in a school, including all four procedures, is about 6 months to 1 year. If only one or two procedures are implemented, this time will be shortened.

As recommended by the developers, each procedure is scheduled into regular curriculum areas as follows: (1) Adult-child reading conferences are held weekly for 10-15 minutes, (2) goal-setting conferences are held weekly for about 10 minutes on an individual or small-group basis, (3) tutoring sessions are 10-20 minutes long and may be held weekly or more often, and (4) small-group conferences to encourage self-directed prosocial behavior are 20-30 minutes long and held weekly. These time recommendations are flexible and may be adapted to meet the needs of the children and the school. The length of time required to meet IGM objectives for the student necessarily varies with the individual child, the target behavior, and the particular instructional-motivational procedures being used.

IMPLEMENTATION PROCEDURES

A designated IGM coordinator who has attended a 2-day workshop sponsored by the developers conducts a 2-day inservice program for leaders from individual elementary or middle schools from one or more school districts. These leaders, in turn, conduct an inservice session for the staff of each building. Inservice education for the staff of a building uses the IGM text *Individually Guided Motivation*, other print materials, and the five IGM films which may be purchased or rented (materials may be shared by several school buildings). Teachers receiving inservice study the text and view and discuss the films. Exercises and activities to familiarize teachers with motivational behaviors and skills relevant to each procedure are presented in the IGM text. After becoming familiar with the IGM system and the four procedures, the staff decides which procedures to implement and when.

Decision to implement IGM requires cooperation and initiative on the part of school staff. Thus, certain organizational and scheduling changes will probably be necessary to incorporate the procedures into the instructional program of a school. Certain of the procedures are typically implemented using aides, noncertified adults, or parent volunteers. This supplementary staff must be recruited and trained in motivational principles and related behaviors using IGM guidelines and materials available for the purpose (e.g., *Tutoring Can Be Fun*, *A Guide for Adult-Child Reading Conferences*).

Once in operation, maintenance costs for the IGM system are minimal. If continuous formal assessment of student progress is desired, checklists and other evaluation guides to aid in recordkeeping are printed in the IGM text and can be duplicated within the school at low cost. In general, materials associated with IGM implementation are few in number and they are reusable, durable, and easily maintained.

MATERIALS AND EQUIPMENT

The developers recommend these materials and quantities for each school building implementing IGM.

IGM is relatively inexpensive to implement when costs are considered on a per-pupil basis. Using the current prices of the materials and assuming a building of 400 students, the cost per pupil for any component or for the total system would be as follows: Procedure 1—$1.04 procedure 2—$1.04; procedure 3—$1.17; procedure 4—$1.11; total IGM system—1.09.

The above costs are based on the prices of materials and an estimated average cost for training an IGM coordinator; they are therefore nonrecurring costs. Furthermore, the center recommends that each set of films be made available to five school buildings. Thus, in terms of both the expenses for training a coordinator and the purchase of the films, the costs can be spread over a greater number of students and substantially reduce the cost per pupil. Another means for reducing the cost is for the schools to rent the films for the center.

Personnel Required for Product Adoption and Implementation

A designated building leader (e.g., the principal, a unit leader, or a school guidance counselor) selected by the individual school is responsible for providing inservice education to the building staff. Certain of the IGM procedures typically use nonteachers (e.g., noncertified adults, parent volunteers) and this supplementary staff, if used, requires training in using the procedure. IGM print and film materials are used to aid in training such additional personnel. In general, IGM is relatively self-sufficient and needs little, if any, continuing support to be used properly.

ASSURANCES AND CLAIMS

Assurances

IGM is transportable. Evidence is available indicating that after a 2-day inservice education, school personnel can learn the motivational principles and procedures underlying IGM. Moreover, at this time they can prepare implementation plans for local school use. The program may thereafter be implemented by a school staff with little or no additional aid from the program's developers.

The developers and publishers of this program have received no reports of harm associated with use of IGM. Indeed, teachers and students have expressed favorable reactions and positive attitudes toward IGM. The developers are confident that the materials contain no social bias, ethnic or sexual stereotyping, or other socially objectionable references.

Claims

The IGM system has been carefully developed and tested. The four motivational-instructional procedures were identified and developed in cooperation with staffs of various school systems. Controlled experiments in schools were carried out to determine the conditions under which each procedure is optimally effective. Findings were used in the development of prototypical IGM materials related to each procedure. Field tests of each procedure were subsequently conducted in a number of school systems to determine effectiveness of materials both for adults implementing the program and students participating in a procedure. Field test evaluations contributed to further developments and refinements of the IGM materials.

School personnel can learn to use IGM materials effectively. Following inservice education they: Understand the motivational principles, procedures, and implementation requirements; can apply the motivational principles with children in a school setting; and can complete the required implementation tasks, such as conducting a local inservice, gathering baseline information on students, selecting students to participate in a procedure, and keeping records to monitor motivational progress.

Based on a field test with six schools, the success of independent reading conferences has been demonstrated. Independent reading conferences enable children to read more books, to develop more positive attitudes toward reading, to show higher reading achievement scores, and to continue to read more books independently after conferences have been discontinued. Younger children and poor readers benefit particularly. The procedure is effective with children from a variety of socioeconomic backgrounds, regardless of whether conferences are conducted by teachers, aides, or parent volunteers.

Evidence accrued during field testing in three schools shows that children benefit from goal-setting conferences. Following this procedure, children increase in skills mastery in a variety of curriculum areas and maintain improved rates of skill mastery after goal-setting conferences are discontinued. Positive attitudinal changes toward school have been reported by parents.

Positive results associated with participation in small-group conferences to promote self-directed prosocial behaviors have been demonstrated in field testing in eight schools. Following this procedure, children increase in frequency of specific prosocial behaviors, maintain this increase after conferences stop, and exhibit a target prosocial behavior with a frequency rate similar to that shown by the rest of the class.

Based on a field test with two schools, tutoring has a beneficial effect on the tutee. As a result of the tutoring procedure, tutees are able to increase in achievement on specific tutored skills and to maintain positive attitudes toward tutoring sessions. Both tutees and tutors express enjoyment of tutoring sessions.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Text, *Individually Guided Motivation*	1 per teacher	2.00	Reusable	
Tutoring Can Be Fun	1 per tutor	1.75	Reusable	
A Guide for Adult-Child Reading Conferences	1 per conference leader	1.00	Reusable	
Inservice Implementation Manual for IGM	1 per building leader	1.00	Reusable	
Films: "Individually Guided Motivation: An Overview" "Encouraging Independent Reading" "Setting Individual Goals for Learning" "Guiding Children as Tutors" "Guiding Children Toward Self-Directed Behavior"	1 set per 5 schools	85.00 per film or 350.00 per set (films may also be rented for 3.00 per day plus 5.00 for handling)	Reusable	

DEVELOPER/AUTHOR:

Wisconsin Research and Development Center
University of Wisconsin
Madison, Wis.

Herbert J. Klausmeier, Principal Investigator

AVAILABILITY

Individually Guided Motivation (IGM) is under developmental copyright. Commercial copyright has been authorized upon commercial publication. All IGM materials are currently available from:

CCL Document Service
Wisconsin Research and Development Center
1025 West Johnson St.
Madison, Wis. 53706

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 022

PREPARING AND USING SELF-TEACHING UNITS FOR FOREIGN LANGUAGES

Self-teaching units to guide the teacher's choice in learning medium and evaluation procedures for teaching foreign languages

Each unit of *Preparing and Using Self-Teaching Units for Foreign Languages* is designed to teach a specific concept or skill. A unit consists of a stated performance or behavioral objective, activities to enable the student to achieve the objective, and a test to determine whether the student has succeeded. This booklet begins with a description of the performance objective, and several sample objectives are presented. Section 2 contains suggestions on the selection and presentation of learning activities. In section 3, suggestions are made concerning ways in which self-teaching units can be used. Section 4 is devoted to the construction of a self-teaching unit. A self-instructional German lesson is presented as a sample, and the booklet concludes with recommendations concerning the teacher's choice of learning medium and effective evaluation procedures.

SUBJECT AREA(S)

The subject area is foreign language curriculum development at the classroom level.

INTENDED USERS AND BENEFICIARIES

Although intended primarily for the foreign language classroom teacher, this publication will also be of use to foreign language curriculum specialists, supervisors, and trainers of teachers.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1611 North Kent St.
Arlington, Va. 22209

Gerald E. Logan, Author

AVAILABILITY

Order No. ED 098 808, $0.76 (microfiche), $1.58 (paper), add $0.18 (postage). Order from:
ERIC Document Reproduction Service
P.O. Box 190
Arlington, Va. 22210

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 023

THE USE OF LEARNING PRINCIPLES IN INSTRUCTION

Textbook on the design of lessons and curriculum for graduate students and curriculum designers

Use of Learning Principles in Instruction is a 34-unit textbook suitable for use as a self-study text or as the basis for a one-semester Keller-style course in lesson design for graduate students, advanced undergraduates, and curriculum writers and designers. The text aims at establishing in students: (1) A working knowledge of behavioral principles and their contribution to the development of good educational materials, (2) the ability to discriminate good from not-so-good curriculum materials over a very broad range of learning tasks, and (3) the ability to produce good curriculum materials in their own subject area.

The course is based on three assumptions about the nature of the technology of teaching. First, modern curriculum development is an applied science. A developer then must understand the fundamentals of the science in order to be able to apply it effectively across a wide range of learning tasks. One section of the text is devoted to basic learning principles as exemplified in the analysis of operant behavior.

Second, specific "models" of instruction are too limiting because they are merely particular codifications of underlying principles applied in a special domain. This text concentrates on the process of educational design and avoids a cookbook approach.

Third, experience with a variety of materials in a variety of contexts is necessary for one to abstract the useful principles. Students examine such diverse materials as *Sesame Street*, *Wishes, Lies and Dreams* (a procedure to get children generating poetry), Itard's procedure in training the wild child of Aveyron, as well as several conventional learning programs.

In most units students read some source materials (articles or samples of lessons) and then answer questions on them. They compare their answers to an answer key, then see their instructor for a brief interview before going on to a new unit. (A student using the text for self-study eliminates the interview process.) Other units require the production of curriculum material. Students are given guidelines in evaluating their own productions, and are encouraged to submit them to their peers as well as their instructor for evaluation.

The instructor is provided with a suggested interview question for each unit and guidelines for evaluating student replies. The teacher's manual also provides two section tests and a posttest.

SUBJECT AREA(S)

The subject matter of this course is the design of lessons and curriculum.

The first five units of the text provide a general overview and include some of the original writings on programed instruction, Individually Prescribed Instruction (IPI), Keller's Personalized System of Instruction, and contingency management. This overview provides both the critical principles that will be reflected in all good curriculum materials (e.g., active responses, immediate reinforcement, gradual progression in complexity of student response to promote errorless learning), and a rationale for looking at fundamental learning principles.

The second major section (six units) teaches the fundamental principles of the experimental analysis of behavior. For these units, students select a supplemental text (see "Materials and Equipment" section). In addition, each unit's source material contains an example of an educational application of these principles.

The third major section (six units) teaches the application of the fundamental principles of behavior to curriculum design. These units cover behavioral objectives, task analysis, learning hierarchies, and task taxonomies. Following this section, students begin to design a lesson in their selected subject matter.

In the final and longest section (17 units) students learn methods of evaluating lessons and practice evaluating a wide range of lesson materials. They also continue work on production of their own lessons. Students are encouraged to submit their lessons periodically to peer and instructor editing and evaluation.

INTENDED USERS AND BENEFICIARIES

The range of potential users is broad. Among these who have used this text in try-out versions and found it helpful were persons currently employed in jobs with some form of curriculum development responsibility (e.g., at Pittsburgh's Learning Research and Development Center, Philadelphia's

Research for Better Schools, and the Pennsylvania State Board of Education); high school and elementary school teachers; school administrators; graduate students in education; and undergraduates in speech correction.

The ultimate beneficiaries are the future students who will be using more effective educational materials designed or selected by a user of this text.

GOAL(S) OR PURPOSE(S)

The goal of this course is to enable students: (1) To recognize the operation of principles from the experimental analysis of behavior in curriculum materials, (2) to state learning tasks in behavioral terms, (3) to design effective curriculum materials which achieve the stated learning task, and (4) to evaluate learning materials in terms of their teaching effectiveness.

PATTERNS OF USE

The text may be used for self-study or as the basis for a Keller-style course. The chief characteristic of a Keller-style course is the demand for mastery of each unit of coursework before the student progresses to the next unit (F.S. Keller, *Journal of Applied Behavior Analysis*, 1968). When using the text for individual study, students are expected to test themselves on each unit and use the suggested answers as the basis for scoring their own work. When the text is used as the basis of a Keller-style course, students are expected to answer unit questions and then see the instructor for a "mastery interview" before going on to the next unit. The first 17 units are sequential; the order of the later units may be varied.

ASSESSMENT PROVISIONS

The teacher's manual contains two section tests (for the first and second sections of the text) and a posttest for use at the end of the course. It also contains suggested interview questions for each unit to assure correct use of the text by students. Curriculum produced by students as part of the course is evaluted by the instructor and other students. Students using the text for self-study use the answer key for assessment of progress.

TIME REQUIREMENTS

The course is usually completed in one semester, but completion time varies among individuals and depends on the size of each student's selected project. The text has been used as the basis for a 6-week intensive course, but such time constraints are not recommended except for very advanced students.

IMPLEMENTATION PROCEDURES

The text is complete enough to be used for self-study by advanced students. Instructors should have a background in the science of behavioral analysis, derived from use of the text or from other sources, and experience with curriculum materials. People currently employed on curriculum development projects could also use the text for group or individual study without a designated instructor.

ASSURANCES AND CLAIMS

Assurances

In development, approximately 100 students have used the text in 3 formal, Keller-style courses. One of these was conducted at Emerson College in Boston without developer participation. This hands-off field test was less successful than we had hoped because a short time period (6 weeks) and high enrollment (50 undergraduates) made it impossible for instructors to monitor each student's unit-by-unit progress. As a result of this field test, the teacher's manual and the introduction of the text now stress the importance of adequate monitoring and sufficient time to allow students to progress at their own rate. We believe these changes are sufficient to make the course transportable.

In a questionnaire administered to students in one of the courses in which this text was used, no students reported harmful effects. Our staff has examined the material carefully and has failed to find racial or sexual bias, excluding occasional use of the generic "he" in various source materials.

Claims

Use of Learning Principles in Instruction is an effective instructional program. The materials produce a considerable competence in graduate level students for critical judgment and production of curriculum materials which reflect the best of laboratory learning principles.

The program has been through three cycles of test and revision, each of which has included evaluation of the program's effectiveness. The first tryout was with a group of 10 special students, all of whom took the course in a special 6-week institute in summer and fall 1971. All these students already were employed in jobs with some form of curriculum development responsibility. The program was revised following this tryout.

After revision, the course was offered for graduate credit in the Educational Psychology Department of the University of Pittsburgh in summer 1973. Sixteen students participated, including elementary and high school teachers, school administrators, and curriculum writers. There were four sources of evaluation data: The students' responses for each unit, pretest and posttest results, a questionnaire, and the curriculum material produced by the students.

The final test was a hands-off field test at Emerson College in Boston. Two faculty members had the requisite background and were interested in using the course. Forty-six undergraduates enrolled. Because enrollment was much larger than expected, instructors dropped portions of the course and did not regularly monitor student answers.

An identical form pretest-posttest was used to measure student's ability to articulate behavior principles, to discriminate curriculum materials, and to produce samples of curriculum. For the first two tryouts using graduate students and practicing curriculum developers, overall pretest scores were 53 percent and 34 percent, while posttest scores were 83 percent and 61 percent. The median undergraduate pretest score was only 6 percent, and posttest median was 52 percent. Although the gain is sizable, the results were rather disappointing. Proper use of the material should produce better performance. The text now strongly suggests that undergraduates have adequate monitoring.

MATERIALS AND EQUIPMENT

Required Items	Quantity Needed	Cost per Item in Dollars	Replacement Rate and Cost	Source if Different from Distributor
Textbook	1 per student	12.00	Reusable	Addison-Wesley
Teacher's manual	1 per teacher		Reusable	Addison-Wesley
Basic text in behavioral principles—Select 1 of 4	1 per student		Reusable	
Ferster and Perrott, *Behavior Principles*, 1968		10.50		Appleton-Century-Crofts
Holland and Skinner, *The Analysis of Behavior*, 1961		6.50		McGraw-Hill
Reynolds, *A Primer of Operant Conditioning*, 1968		7.50		Scott-Foresman
Wheley and Malott, *Elementary Principles of Behavior*, 1971		7.95		Prentice-Hall

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AVAILABILITY

Presently, a complete inhouse version of *Use of Learning Principles in Instruction* is available. Order from:

Learning Research and Development Center
University of Pittsburgh
3939 O'Hara St.
Pittsburgh, Pa. 15260

In 1976, a published version of this material (probably under a different title) will be available from:

Addison-Wesley Publishing Co.
Reading, Mass. 01867

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 024

ACCREDITATION PROBLEMS AND THE PROMISE OF PBTE

A paper on the relationship between the accreditation of teacher education institutions and performance-based teacher education

This paper examines the relationship between the accreditation of teacher education institutions and performance-based teacher education. After a brief historical review, the author discusses four basic accreditation problems: (1) The need to allow for institutional differences, (2) the need to base decisions on substance rather than form, (3) the need to determine the actual qualifications of the graduate, and (4) the need to determine the focus or function of accreditation. Institutional statements of objectives for teacher education are frequently vague and provide little guidance for the accrediting team. The objectives of one institution are examined in detail to illustrate these problems. Performance-based teacher education, which requires the explicit definition of expected competencies, could help to move accreditation toward being based on elements of substantive achievement and could encourage a rethinking of admissions criteria. Finally, the two purposes of accreditation are considered; whether it should be used to identify institutions which meet a minimum set of standards or to stimulate institutions to improve their programs significantly.

SUBJECT AREA(S)

Institutional accreditation problems and needs and the relationship of performance-based teacher education to accreditation.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teacher educators, State agency officials, and elementary and secondary school personnel.

GOAL(S) OR PURPOSE(S)

This paper examines the relationship between the accreditation of teacher education institutions and performance-based teacher education.

DEVELOPER/AUTHOR:

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Rolf W. Larson

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 025

ALTERNATIVES FOR SCHOOLS OF EDUCATION CONFRONTED WITH EDUCATION ENROLLMENT AND REVENUE REDUCTIONS

A review of teacher supply and demand and its implications for teacher education institutions

This monograph reviews the alternative responses to the current teacher supply-and-demand situation being made by schools, colleges, and departments of education. Some options are identified as eliminating nonproductive programs and courses, emphasizing training in areas where shortages exist, refocusing the orientation of institutions to meet the training needs of nonschool settings, and expanding school-service components, particularly inservice and continuing education oriented to the needs and aspirations of teachers in school situations. It is impossible to predict accurately the number of new teachers who will be needed in the future; and additional questions are whether society will be willing to support a teaching force adequate for peak demand periods and whether employment alternatives should be considered. The teacher surplus does not take into account the growing need for new types of learning facilitators in nonschool settings, and these options should be considered as part of a realistic response to preparing multifaceted personnel for all of America's learning institutions.

SUBJECT AREA(S)

This monograph discusses teacher supply and demand and its impact and implications for teacher education institutions.

INTENDED USERS AND BENEFICIARIES

The intended users of this monograph are teacher education institutions; educational administrators; college and university faculty; Federal, State, and local legislators.

GOAL(S) OR PURPOSE(S)

The purpose of this monograph is to provide alternative responses for teacher education institutions with regard to the current supply-and-demand situation.

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David Imig

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RD 200 026

BEGINNING TEACHERS IN THE INNER CITY: A STUDY OF THE LITERATURE ON THEIR PROBLEMS AND SOME POSSIBLE SOLUTIONS

A review of the literature of problems of beginning teachers working in the inner city

This paper reviews literature on problems encountered by beginning teachers in the inner city and points out some steps that have been taken in both preservice and inservice teacher education to alleviate these problems. While books such as *Death at an Early Age* and *Up the Down Staircase*, are briefly reviewed, greater attention is given to research reports, program descriptions, program proposals, and comments by beginning teachers themselves. The section on current programs gives details of 24 programs which have been implemented and briefly describes 24 additional programs for which only limited material was available. The author concludes that the most important ingredients for successful urban teaching are the attitude of the prospective teacher and early, extensive preservice experience with the realities of the inner city. (A 137-item annotated bibliography is included.)

SUBJECT AREA(S)

This paper reviews the literature on problems encountered by beginning teachers in the inner city and points out some steps that have been taken to alleviate these problems.

INTENDED USERS AND BENEFICIARIES

The intended users are the inservice and preservice teachers and teacher educators.

GOAL(S) OR PURPOSE(S)

The goals are to present to readers some of the problems involved in teaching and training teachers for inner-city schools and to present some suggestions to alleviate these problems.

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Moira B. Mathieson

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RD 200 027

THE CAMPUS LABORATORY SCHOOL: PHOENIX OR DODO BIRD

A discussion of the history, purpose, and future of campus schools

The development of the campus laboratory school is traced from its origins in Europe in the 17th century and in the United States normal schools of the 1820's. These schools served as models of the desired teaching methods and provided opportunities for student teaching. Even before 1900, the function of the schools was being debated and the need was recognized to use them as experimental schools to test and demonstrate new techniques and materials. The student body in campus schools tended to be highly selected and too small to serve expanding programs of teacher education. In the late 1960's, much student teaching was transferred to public schools; and the concept of teacher education was changed to increase the collaboration between schools and colleges, with a resultant demand for more responsibility for the classroom teachers in student teaching and accreditation. The new emphasis is on a joint enterprise by public schools, universities and colleges, the community, and related public agencies. The means of disseminating the results of experimentation and research must be improved if campus schools are to have a useful future, and there must be opportunities for curriculum development and professional leadership. There is a need for flexible facilities which can be adapted to a variety of uses and for laboratory facilities primarily devoted to inservice education. The activities should be defined and limited to those which can make a unique contribution to the program of the sponsoring agencies.

SUBJECT AREA(S)

The history, purpose, and future of campus schools.

INTENDED USERS AND BENEFICIARIES

The intended users of this program are those involved with campus schools, and those interested in cooperation between schools, universities, and communities in general.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to make the reader aware of problems and potentialities in campus schools.

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Dorothy M. McGeoch

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RD 200 028

CLASSROOM OBSERVATION SYSTEMS IN PREPARING SCHOOL PERSONNEL

A state-of-the-art and 42-item bibliography on classroom observation systems in preparing school personnel

This state-of-the-art paper and its accompanying 42-item annotated bibliography are on classroom observation systems in preparing school personnel. The paper is divided into four parts: (1) "Introduction," (2) "Description of Selected Classroom Observation Systems," (3) "Use of Classroom Observation Systems in the Preparation of School Personnel," and (4) "Summary and Conclusions." Part 2, the most detailed section, describes the more important classroom observation systems (i.e., "organized and systematic attempts to assess and qualify, through observation, the behaviors of teachers and students engaged in the teaching-learning process"). These systems are grouped into affective systems (those concerned primarily with intellectual activities which result in the improvement of cognitive processes and skills) and multidimensional systems (those which attempt to assess both the affective and cognitive domains). Among the conclusions suggested by this comparative study are that classroom observation systems (of which the affective ones have been most widely used) can be used profitably in conjunction with microteaching, role playing, and other preservice laboratory teaching experiences; and that, through their emphasis on teaching behaviors and indirect teacher influence, they have contributed to a greater emphasis on laboratory experience in teacher preparation and to an increasing "humanization" of teaching.

SUBJECT AREA(S)

This document includes a state-of-the-art paper and a 42-item bibliography on classroom observation systems in preparing school personnel.

INTENDED USERS AND BENFICIARIES

The intended users of this document are all those directly involved in teacher preparation.

GOAL(S) OR PURPOSE(S)

The goal of this document is to examine how classroom observation systems can be used in preparing school personnel.

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COMPENSATORY EDUCATION: IMPLICATIONS FOR TEACHER EDUCATION

A paper providing an analysis of development and teacher implications of compensatory education

This paper is divided into three parts: Compensatory education and its future, the kind of teacher education which will be used to support these compensatory trends, and a bibliography selected to provide background for both sections. The first part reviews the present condition, developments of compensatory education, the implications of future developments in other areas of education, and value judgments. The second part, implications for teacher education, concerns the forces and trends affecting education. Also included is an outline summary of what content might be offered to future teachers to support the compensatory education movement and the likelihood of such content actually being offered. The final section includes an annotated bibliography on teacher education and further selected bibliographies on teacher education, compensatory education, selected programs and demonstrations, selected project descriptions and discussions, and compensatory programs.

SUBJECT AREA(S)

This document is concerned primarily with compensatory education, its development, and its implications for teacher education.

INTENDED USERS AND BENEFICIARIES

Teacher educators are the primary users of this publication, but other persons interested in compensatory education will benefit from it.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to provide a sound background analysis of compensatory education.

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Martin Haberman

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RD 200 030

COMPETENCY-BASED EDUCATION:
THE STATE OF THE SCENE

An outline of the competency-based education movement in the United States

This document outlines the Competency-Based Education (CBE) movement in the United States. Following introductory material, this outline covers the roots of the CBE movement; distinguishing characteristics, degree of participation by States, higher education, teachers, administrators, and community; current resources; a bibliography of significant publications; major issues; a glossary for CBE; and a profile of CBE by State.

SUBJECT AREA(S)

The subject area is Competency-Based Education (CBE).

INTENDED USERS AND BENEFICIARIES

The intended users of this document are persons within the education community who wish to become familiar with CBE and those interested in its implementation.

GOAL(S) OR PURPOSE(S)

The goals of this document are to enable the reader to master the basic concepts and terminology and use them as a point of departure in studying the evergrowing literature on CBE, and to enable the reader to implement those aspects of CBE which are desirable and feasible in particular educational settings.

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Allen A. Schmieder, Author

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 031

COMPREHENSIVE PROPOSALS FOR TEACHER EDUCATION: A CONCISE GUIDE DERIVED FROM DONALD R. CRUICKSHANK'S STUDY OF PROPOSALS FOR SECOND-PHASE COMPREHENSIVE ELEMENTARY TEACHER EDUCATION MODELS PROJECT

A review of applications for phase 2 of the program to determine their general characteristics and their reactions to the program

The proposals from 27 of the 34 applicants for phase 2 of the *Comprehensive Elementary Teacher Education Models (CETEM) Program* were reviewed to determine, among other things (1) which kinds of institutions participated, (2) how responsive applicants were to guidelines, (3) which phase 1 programs phase 2 applicants found most useful, (4) what were some major and common features of phase 2 programs, and (5) how applicants felt about phase 3 competition. It was found that applicants were mostly State colleges and universities and that applicants varied considerably in how they responded to guidelines. Taken together, they were strongest in describing programmatic features. Phase 1 work of Michigan State, Syracuse, Massachusetts, and Florida State was found most useful; there was agreement on many teacher education program features. Applicants felt that phase 2 competition was exhilarating but that they doubted the existence of fair competition. The conclusions were that the process of teacher education curriculum needs a theoretical base before the profession can engage wisely and economically in curriculum reform; that phase 2 applicants did provide a blueprint for teacher education, requiring dissemination and support; and that the U.S. Office of Education (USOE) must plan more efficiently and communicate more effectively.

SUBJECT AREA(S)

This document reviews 27 of the 34 applicants for phase 2 of the *Comprehensive Elementary Teacher Education Models Program.*

INTENDED USERS AND BENEFICIARIES

The intended users are educational leaders in elementary education at all levels.

GOAL(S) OR PURPOSE(S)

The goal of this document is to determine general characteristics of and reaction to the *Comprehensive Elementary Teacher Education Models Program.*

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Joel L. Burdin et al.

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RD 200 032

CONCEPTS OF TEACHER CENTERS

Review of the literature on problems of designing a teacher center

This report reviews the literature that is pertinent to a broad understanding of the teacher center concept and to the specific problems of designing a teacher center. Emphasis is placed on the origins, themes, methods of operation, and future plans for teacher centers. The origins include the revolution in teacher training underway in England, the stress placed on ongoing inservice teacher training in the United States, and the movement toward competency-based teacher education and certification. The major themes stress the felt needs of the teacher, a school improvement thrust, and a need to increase teacher competency. Three styles of operating teacher centers are discussed: The informal English style, the corporate style, and the competency-oriented style. A 29-item bibliography is included.

SUBJECT AREA(S)

The subject area is teacher centers.

INTENDED USERS AND BENEFICIARIES

This publication is of use to the general education community and, especially, those concerned with the professional development of teachers.

GOAL(S) OR PURPOSE(S)

The goals of this publication are to analyze teacher centers and to assist in the conceptualization and implementation of teacher centers.

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Bruce R. Joyce, Author
Marsha Weil, Author

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INFORMATION CURRENT AS OF MARCH 1975 ■

EFFECTIVE OBSERVATION OF EDUCATORS

A discussion of how teachers' value systems can determine their interpretations of children's behavior

This paper presents a discussion of value presuppositions which can determine the "facts" upon which children are judged, learning situations are structured, and relationships, in general are established. The assumptions or presuppositions are: (1) That young children necessarily have a short attention span, (2) that "giving" children language is always a good thing, (3) that maximum intervention is educationally sound, (4) that people are neither out of their minds nor out of their bodies, and (5) that people recognize that they are a violent society. It is concluded that, to use observation effectively, educators must be prepared to continually reassess their own system of values.

SUBJECT AREA(S)

The subjects discussed in this paper include: Early childhood educational practices, childhood needs, observation and student evaluation, learning processes and student-teacher relationship, and teacher role and social values.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teachers and caregivers of young children. The paper is also of interest to administrators and teacher trainers.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to emphasize the need for educators to be aware of how their own value systems can affect their interpretations of children's behavior.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Early Childhood Education
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Urbana, Ill. 61801

Evangeline M. L. Walker, Author

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1418

RD 200 034

EXPLORING TEACHERS' CENTERS

Descriptions of centers that offer inservice training or advisory services to elementary school teachers

Exploring Teachers' Centers will contain 30 or 40 descriptions of selected American centers which offer inservice training or advisory services to elementary school teachers. Each center description is organized around a format which will be common to all the entries and which is designed to help readers focus on commonalities and uniquenesses among centers. The statement about each center will include a short description of setting, constituency, educational program, instructional style, staff, origins, governance, and priorities. Each entry will stand as a unique, colloquial definition of the term "teachers' centers," but all together the statements will help to explain and illustrate this new field of inservice practice and thus contribute to readers' translation of the basic ideas to their own local situations. The book will also contain a number of position papers about inservice education and the teachers' center movement and its implications for American education.

Exploring Teachers' Centers is part of a 14-month survey and design study to investigate the feasibility of creating an information and resource exchange network between American teachers' centers. Compilation of a directory of teachers' centers, advisories, and similar programs, and the offering of referral and matchmaker services within this constituency and with interested outsiders, was one of several "information central" functions that leaders of experienced American teachers' centers and advisories volunteered during a summer 1974 survey.

SUBJECT AREA(S)

Inservice education for teachers

INTENDED USERS AND BENEFICIARIES

The intended users of this product are inservice educators, university professors of education, practicing-teacher groups, and others interested in alternative forms of inservice education.

GOAL(S) OR PURPOSE(S)

The goals of this program are: (1) To respond to a need expressed by leaders in teachers' centers; (2) to make available information gathered about centers; and (3) to see whether this practical information about centers can serve as the start for a central information-, idea-, and resource-sharing organization among these teachers' centers and incipient teacher-determined staff-development programs. (A questionnaire survey of recipients will be conducted to ascertain their uses of the information in the book and their evaluation of a continuing resource center.)

PATTERNS OF USE

The product is a reference tool.

DEVELOPER/AUTHOR:

Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, Calif. 94103

Kathleen Devaney
Lorraine Thorn

AVAILABILITY

***Exploring Teachers' Centers* will be distributed in April 1975 to a selected audience interested in alternative methods of inservice education. No plans have been made to make the book available for wider distribution.**

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 035

FIELD-BASED TEACHER EDUCATION AND K-12 PERSONNEL RESPONSIBILITIES IN TEACHER EDUCATION: A REVIEW

An examination of the implications of field-based teacher education

This monograph traces the development of field-based teacher education in the United States from the first State-supported normal school (1839) to the present questions of control and the dual system of standards of the National Association of State Directors of Teacher Education and Certification and the National Council for Accreditation of Teacher Education. Some of the topics reported on are associations and unions, competency-based teacher education, local needs, teacher centers, reciprocity systems, and economic problems. The extensive appendixes provide the reader with reference material for better understanding the text. They are "Standard VI—Professional Laboratory Experiences"; "Constitution of the CITE Project"; and "Interstate Agreement on Qualification of Educational Personnel Contract."

SUBJECT AREA(S)

The development of field-based teacher education, including the roles of associations and unions, performance-based teacher education, local needs, teacher centers, reciprocity systems and economic problems.

INTENDED USERS AND BENEFICIARIES

This document was prepared for use by teacher educators, decisionmakers, and practitioners on all levels of education.

GOAL(S) OR PURPOSE(S)

This document provides an examination of the implications of field-based teacher education, the involvement of the teaching profession in decisions about college-based programs and their impact on certification and accreditation.

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Ward Sinclair

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RD 200 036

FLEXIBILITY IN PROGRAM PLANNING AND NCATE STANDARDS

A discussion of flexibility as it is viewed by the standards of the National Council for Accreditation of Teacher Education

This monograph discusses the question of flexibility as it is permitted by the standards of the National Council of Accreditation of Teacher Education (NCATE), a question of concern to educators eager to meet the standards, but also eager to satisfy the needs of school personnel. Flexibility is defined, and the purpose and design of NCATE standards are discussed. It is indicated that deliberate effort is said to have been made in the standards to encourage individuality, imagination, and innovation. In spite of this stated effort, the author continues, questions about flexibility persist for the following reasons: Lack of distinction between flexibility and alternative approaches, lack of distinction between standards as a basis for program development and evaluation and as a framework for preparing the institutional report, lack of statements in the standards about experimentation, and uncertainty about what the visiting team and evaluation board deem important. Each of these reasons is examined in relation to the standards. The author advocates working within the standards to improve and develop programs and further explication of the standards by NCATE.

SUBJECT AREA(S)

Subject area concerns the standards of NCATE and the need for more flexibility in these standards.

INTENDED USERS AND BENEFICIARIES

The intended users are primarily collegiate-level teacher educators.

GOAL(S) OR PURPOSE(S)

Based on material assembled at a writing conference at Gatlinburg, Tennessee, on June 19, 1972, the publication should stimulate progress toward relevant and vital programs, as accreditation is a powerful influence in teacher education.

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 037

A GUIDE TO A COMPETENCY-BASED FIELD-CENTERED SYSTEMS APPROACH TO ELEMENTARY TEACHER EDUCATION

A model demonstrating elementary teacher competencies necessary for certification

The ComField model of the Northwest Regional Educational Laboratory requires that trainees demonstrate, prior to certification, their ability to bring about learning outcomes in children and parental involvement in the program. Hence, the functions and behaviors of teachers in given settings need to be specified. The ComField model itself does not specify the functions and behaviors; rather, the adopting college and public school systems should be equal partners in selecting the competencies and behaviors to be taught in laboratory and live conditions. Similarly, they should jointly evaluate trainee performance and make policy decisions. The model also expects the trainee to become a self-understanding, self-directed learner; to contribute to the design and continual assessment of the program; and to function in a wide range of social contexts. The latter presumes the involvement of the community. The model provides for a preservice component, which can be adapted to many types of education programs, and an inservice component for supervising and practicing teachers. It also features eight support systems: personnel, supplies, instructional development, program evaluation, program modification, cost accounting, and a computer-based information management system.

SUBJECT AREA(S)

Teacher education.

INTENDED USERS AND BENEFICIARIES

The intended users of this model are teacher educators involved in preservice and inservice of elementary education-trainee preparation.

GOAL(S) OR PURPOSE(S)

The goal of this program is to present a model which demonstrates teacher competencies before certification.

DEVELOPER/AUTHOR:

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H. Del Schalock

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 038

A GUIDE TO BEHAVIORAL SCIENCE ELEMENTARY TEACHER EDUCATION PROGRAM

A model for teaching approached as a clinical practice

A key concept of the Michigan State University model is the clinical behavior style of the teachers it produces. Teachers are expected to approach teaching as clinical practice and to stylize a particular set of activities: Describing, analyzing, hypothesizing; prescribing, treating, analyzing, hypothesizing; prescribing, treating, and observing consequences. Training in the clinical approach occurs, in part, in a clinic-school network—a cooperative project of the university and one or more school systems—where prospective teachers observe and analyze teacher behavior patterns, where interns teach, and where the university staff develops teaching materials. The model, which was designed by interdisciplinary teams, has five major areas of study: General-liberal education, scholarly modes of knowledge, professional use of knowledge, human learning, and clinical and field study. The trainee moves individually through single-purpose experiences and modules, each of which aims for a specific behavioral objective. The modules, as well as information about student progress, evaluation, research, and clinic-school settings (rural, suburban, and urban), are part of an information retrieval system. Trainees may specialize in a subject area and age group. The program also features entrance requirements based on evolving standards of continual feedback for program modification, early trainee experience with children, and faculty currency through the rotation of professors into field experiences.

SUBJECT AREA(S)

Teacher education.

INTENDED USERS AND BENEFICIARIES

The intended users of this model are teacher educators involved in preservice and inservice preparation of elementary education trainees.

GOAL(S) OR PURPOSE(S)

The purpose of this program is to present a model in which the key concept is the clinical behavior style of the teachers it produces.

DEVELOPER/AUTHOR:

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W. Robert Houston

AVAILABILITY

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A GUIDE TO EDUCATIONAL SPECIFICATIONS FOR A COMPREHENSIVE ELEMENTARY TEACHER EDUCATION PROGRAM

Specifications of behavioral objectives in elementary education and in elementary teacher preparation

The teacher education model developed by the consortium of Ohio universities contains 818 specifications which include more than 2,000 behavioral objectives. Each specification identifies the behavioral objectives. Specifications were developed within five broad contexts and apply to one or more of the six target populations involved in elementary education and the preparation of elementary schoolteachers. The model is predicated on the assumption that the elementary school will move in the direction of team teaching, specifically with the instructional organization of the multiunit school or a modification thereof. Each specification is identified by number and is coded according to a numerical code in terms of information contained in the specification. This coding process is designed to enable the user of the specifications to deal with them more effectively and flexibly in developing model programs in a variety of contexts. A process was developed whereby composites of specifications can be identified and programs based upon these specifications can be designed and implemented. An evaluative process was designed so that any program arranged in behavioral terms can be evaluated at a given point in time with provisions for prompt and objective feedback for program self-correction and modification.

SUBJECT AREA(S)

Teacher education

INTENDED USERS AND BENEFICIARIES

The intended users of this document are all those involved in elementary education and the preparation of elementary schoolteachers.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to provide specifications on which programs can be based in elementary education and the preparation of elementary schoolteachers.

DEVELOPER/AUTHOR:

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William Wiersma

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A GUIDE TO GEORGIA EDUCATIONAL MODEL SPECIFICATIONS FOR THE PREPARATION OF ELEMENTARY TEACHERS

A presentation of an elementary teacher education program which is based on teacher performance behaviors

At the core of the University of Georgia model are teacher performance behaviors. They are the basis of the trainee's learning activities throughout the 6-year program. The trainee moves through several program phases: Preprofessional, preparing for paraprofessional service, professional, and preparing for specialization in 1 of 15 areas. During these phases, the trainee experiences learning activities through Proficiency Modules (PM's), which are manuals of instruction—available from computers, published documents, or the trainee—that guide the trainee through individual study and group interaction toward acquiring specified behaviors. The modules are classified into "types" if they are to be used sequentially. Each PM also incorporates a variety of evaluation devices for pretesting and posttesting. Data on the trainee's progress (and on the program) are kept in tape storage. Among the model's other features are laboratory and field experiences; multiple entry points and paths; reciprocal agreements with local schools, agencies, and departments; year-round education, and sensitivity training.

SUBJECT AREA(S)

Teacher education

INTENDED USERS AND BENEFICIARIES

The intended users of this program are those involved in both preservice and inservice teacher preparation.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to present teacher performance behaviors for trainees in an elementary teacher preparation program.

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INFORMATION CURRENT AS OF APRIL 1975 ■

A GUIDE TO MODEL ELEMENTARY TEACHER EDUCATION PROGRAM

A model which attempts to institutionalize change by analysis of educational roles and objectives

The University of Massachusetts model is an attempt to institutionalize change by way of a thorough analysis of educational roles, tasks, structure, and objectives. Among the essential characteristics of the model are its provision for a wide variety of possible overall teacher-training strategies and its provision for continuous diagnosis of the needs of each trainee and for constant evaluation of the program components designed to meet these needs. (Cronbach's concept of aptitude-treatment interaction is an important research component of the program.) Trainee requirements are stated in terms of performance criteria in three major areas: Human relations, behavioral skills, and subject matter knowledge. In addition, for every criterion at least two instructional alternatives are provided for learning how to meet the criterion. When the trainees meet the specified criteria requirements, they will have completed the program regardless of the length of time enrolled. Among other major concepts incorporated in the model (organized, managed, and designed according to systems analysis) are: Differentiated staffing, variable entry and exit points, and university commitment to graduates beyond graduation.

SUBJECT AREA(S)

This report deals with an attempt by the University of Massachusetts to institutionalize change by way of a thorough analysis of educational roles, tasks, structure, and objectives.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are teacher educators preparing trainees in elementary education.

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GOAL(S) OR PURPOSE(S)

The purpose of this report is to institutionalize change by way of a thorough analysis of educational roles, tasks, structure, and objectives.

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 042

A GUIDE TO A MODEL FOR THE PREPARATION OF ELEMENTARY SCHOOLTEACHERS

A guide to planning instruction with behavioral objectives for preparation of elementary schoolteachers

Teacher educators need to plan instruction with behavioral objectives; their selection of lesson content, teaching strategies, and student evaluation criteria should be consistent with these objectives. In the Florida State University model program, trainees are expected to reach these goals by progressing at individual rates through performance specifications. The trainee moves through three phases: Underclass (general and preprofessional education, which may be undertaken in a junior college); preservice (academic and professional); and inservice. It is expected that the academic and professional faculty will collaborate closely during this program, stimulus for collaboration comes from the mutual development of a battery of diagnostic tests to be used in trainee selection and placement. Learning for the trainee continues beyond graduation into a full-time teaching position in a "portal school"—a public school responsible for training new teachers as well as educating children. The "portal school" should encourage cooperation between university and school personnel and should provide feedback for improving both the preservice and inservice phases. Other important features of the Florida model are its emphasis on differentiated staffing and its computerized management control system, used to monitor individual trainees' progress and to provide feedback for program modification.

SUBJECT AREA(S)

This is a guide to planning instruction with behavioral objectives for the preparation of elementary school teachers.

INTENDED USERS AND BENEFICIARIES

The intended users of this guide are teacher educators involved in preservice and inservice preparation of elementary education trainees.

GOAL(S) OR PURPOSE(S)

The goal of this guide is to outline a program for elementary education trainees based on behavioral objectives and individualized instruction.

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RD 200 043

A GUIDE TO A MODEL OF TEACHER TRAINING FOR THE INDIVIDUALIZATION OF INSTRUCTION

An educational model to humanize education through individualized instruction

The University of Pittsburgh model addresses itself to the humanization of education through individualized instruction. Large blocks of regular courses are replaced by peer group interaction, independent study, small seminars, and simulated modules of instruction. Throughout preservice and inservice years, the trainee plans a learning program with an adviser—since the trainee is expected to plan learning programs with elementary school pupils when training is completed. During preservice training, the trainee is part of a guidance program concerned with personal as well as professional development, the trainee also selects courses in academic and clinical sequence. Teacher competencies are developed in a clinical school, where the trainee comes as an observer, tutor, assistant teacher, student teacher, and intern. The school is a cooperative project of the college, local schools, teacher organizations, and State or Federal agencies. The model also advises systematic feedback and cooperation between the research-oriented and operation-oriented faculty in the program's implementation.

SUBJECT AREA(S)

Teacher education

This document describes individualized instruction for trainees to be used with their future students.

INTENDED USERS AND BENEFICIARIES

The intended users are teacher educators who are training school personnel, especially those interested in individualizing instruction.

GOAL(S) OR PURPOSE(S)

The goal of this document is to humanize education through individualized instruction.

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RD 200 044

A GUIDE TO SPECIFICATIONS FOR A COMPREHENSIVE UNDERGRADUATE AND IN-SERVICE TEACHER EDUCATION PROGRAM FOR ELEMENTARY TEACHERS

A sample of elementary teacher education models to train teachers to confront and initiate change

The Syracuse University model educates teachers to confront change and initiate change responsibly in schools and communities. The model's 4 preservice years, composed of seven instructional units, focus on process goals. The first 2-1/2 years are devoted to liberal education with the aim of developing new ways of perceiving, realizing, feeling, and deciding. The junior and senior years are for specialization and for professional study in six areas: Methods and curriculum (focusing on problem resolution), child development, teaching theory and practice (focusing on decisionmaking), professional sensitivity training, self-directness, and social-cultural foundations. During the latter unit, the trainees, while working with a counselor determine the behavioral changes they would like to bring about in their pupils and attempt to accomplish those changes in the 5th or inservice year—a year of partnership teaching in a school. All the instructional units are composed of modules, which are planned instructional episodes lasting from several hours to several months. Instruction is often individual; the largest grouping of students is 15. The model also provides for support systems, continual feedback, and the participation of students, teachers, researchers, public schools, and education industries in program development and implementation.

SUBJECT AREA(S)

Teacher education.

This document presents the Syracuse University undergraduate and inservice teacher education programs for elementary teachers, which train teachers to confront and responsibly initiate change.

INTENDED USERS AND BENEFICIARIES

The intended users of this model are inservice and preservice teacher educator-trainees in elementary education.

GOAL(S) OR PURPOSE(S)

The goal of this model is to train teachers to confront change and initiate change responsibly in schools and communities.

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RD 200 045

A GUIDE TO THE TEACHER-INNOVATOR: A PROGRAM TO PREPARE TEACHERS

A model to train teachers for four roles:
institution-builder, interactive teacher,
innovator, and scholar

The teacher-innovator model from Teachers College, Columbia University, trains the teacher for four roles: Institution builder, interactive teacher, innovator, and scholar. Teachers acquire an understanding of these roles during preservice and inservice experiences in four methodologies: Inquiry and feedback groups (democratically organized groups of students who administer the program to themselves under faculty counseling), differential training (a model providing the faculty with ways of individualizing instruction), laboratory school (an inquiry school in which teaching and learning are studied as well as carried on), and a contact laboratory (a "real" school for direct contact with children). An example of the interrelationships among the four roles and methodologies is found in the contact laboratory. The trainee moves through six phases—from experiencing the school as an unpaid teacher aide during the first 4-8 weeks of the program; through tutoring, designing an individualized learning unit, working in an inquiry school, and operating an educational program for children (after school, summers, or weekends); and into internship, which specifies a two-thirds teaching position and proximity to other members of the trainee's feedback group. The model also anticipates technological support systems.

SUBJECT AREA(S)

Teacher education.

This document describes the teacher-innovator model from Columbia University which trains teachers for four roles (institution builder, interactive teacher, innovator, and scholar) during preservice and inservice experiences.

INTENDED USERS AND BENEFICIARIES

The intended users of this model are those involved in both preservice and inservice teacher preparation.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to present a model for preservice and inservice teacher training.

DEVELOPER/AUTHOR:

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RD 200 046

GUIDELINES FOR THE SELECTION OF STUDENTS INTO PROGRAMS OF TEACHER EDUCATION

A review of research evidence relating to the selection of students for teacher education

The author reviews research evidence considered pertinent to the selection of teacher education students and synthesizes the evidence into 11 criteria for selection. The areas of childhood development, adult learning, college influence on students, college student characteristics, and present selection practices are all explored. In particular, the author discusses the durability of values learned in childhood, the outstanding cognitive and affective characteristics of adults in their 20's and 30's (usually considered too old to enter the profession), the relatively weak influence of the college environment on vocationally oriented students, the cultural pluralism of the new student population, and the use of grades as the currently most popular selection criterion for admission into teacher education programs. These observations lead the author to the formation of selection criteria which emphasize a candidate's values and capacity for adult growth and define student characteristics in terms of program goals rather than in terms of typically acceptable student characteristics.

SUBJECT AREA(S)

This publication focuses on selection criteria for students wishing to enter teacher education programs.

INTENDED USERS AND BENEFICIARIES

The intended user of this product is the teacher education community.

GOAL(S) OR PURPOSE(S)

The purpose of this publication is to review research evidence considered pertinent to the selection of teacher education students and to synthesize the evidence.

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INFORMATION CURRENT AS OF MARCH 1975 ■

THE GOVERNANCE OF TEACHER EDUCATION

A paper reviewing three theses of teacher education

This paper developes three theses: (1) Education, generally, and teacher education in particular, are disadvantaged by faulty governance systems and structures; (2) many of the problems of education stem directly or indirectly from these faulty structures; and (3) there is an urgent need for a whole new set of assumptions about the governance of teacher education. The varying interrelationships between the disciplines, professional schools, and professions are examined through the use of concepts of systems, subsystems, and suprasystems. Although teacher education is a subsystem of the university, it also forms a part of the suprasystems of governmental units, the professions, and the community and there is a need for a collaborative relationship between teacher education/university/profession and school unit/community/State. Some conclusions indicate that education should be viewed as the training function of the teaching profession, teacher education should be regarded as a professional school, there should be less emphasis on teacher education as an all-university function, the organized teaching profession should assume the role of major suprasystem, accountability and responsiveness should be sharply defined, and local and State government responsibility should be reduced.

SUBJECT AREA(S)

Governance of teacher education, including the role of the profession, and governing agencies (Federal, State, and local) are discussed.

INTENDED USERS AND BENEFICIARIES

The intended users of this product are teacher educators and administrators of teacher education.

GOAL(S) OR PURPOSE(S)

The purpose of this product is to analyze roles and teachers, both preservice and inservice.

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 048

IN-SERVICE TEACHER EDUCATION—SOURCES IN THE ERIC SYSTEM

A review of 1973-74 inservice teacher education documents in the ERIC data base system

A total of 256 ERIC 1973-74 citations dealing with inservice teacher education was reviewed. Types of documents included project and research reports, syntheses of theory and research, precis of doctoral theses, program proposals, and evaluation studies. Programs to improve the teaching of reading and mathematics to disadvantaged students were numerous, and introductions to new curriculums in other subject areas were well represented. Although many subjects were treated, the reports reflect little attempt to formulate a comprehensive program. Too often, objectives were narrow and unrelated to a larger purpose, and most of the programs focused on the teacher as an individual rather than as a member of a group. None of the reported programs dealing broadly with the professionalization of teachers in a full sense was comprehensive. Few of the reports dealt with formal graduate study. Four documents dealing with broad concerns are identified, and a 30-item selected annotated bibliography is included.

SUBJECT AREA(S)

The primary focus of this publication is inservice teacher education as it is treated in the ERIC data base.

INTENDED USERS AND BENEFICIARIES

The intended users of this document include school district supervisors of inservice education and collegiate personnel involved in inservice education.

GOAL(S) OR PURPOSE(S)

This document is part of a series of brief papers which have been designed to provide a popularized overview of inservice education through an analysis of the literature.

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INSERVICE TRAINING FOR THE BEGINNING TEACHER

An overview of inservice education from an analysis of the literature

The public has a major financial investment in the education of teachers but has failed to give this problem the attention it deserves. Preservice education prepares the teacher only to the readiness-for-teaching stage, and on-the-job experience occupies only a minor proportion of the teacher education program. In the first year of teaching, provision should be made to diagnose, prescribe, and program for the beginning teacher; to correct teaching weaknesses; and to develop competencies. Several exemplary programs, which are discussed briefly, suggest 10 steps that could help in developing a 2-year program of inservice training for the beginning teacher. A concluding section is to be used for the professional development of the teacher, with the heaviest investment during the first 2 or 3 years of teaching and the balance used for inservice development during the remainder of the teacher's career.

SUBJECT AREA(S)

The subject areas include beginning teachers, their needs, and strategies for providing support and meeting their needs.

INTENDED USERS AND BENEFICIARIES

The intended users include the school district supervisors of inservice education and collegiate personnel who are involved in inservice training as resource persons.

GOAL(S) OR PURPOSE(S)

This paper is one of a series which is intended to provide a popularized overview of inservice education from an analysis of the literature to serve as a current awareness publication for educators.

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RD 200 050

INSERVICE EDUCATION FOR TEACHERS OF DISADVANTAGED ADULTS

A review of the literature on the goals of adult basic education students

Inservice education for Adult Basic Education (ABE) teachers is a relatively new development, and teachers need to understand the students' motivation in taking the courses. A brief review of the literature shows that the majority of students attended classes for reasons other than course content. Data gathered in Georgia to examine perceptions of these goals revealed significant differences. Teachers gave first ranking to a desire to learn, which students ranked third. "To make my family proud of me" was ranked 7th by teachers and 4th by students; "to get a better job" was ranked 10th by teachers and 5th by students; and "to pass the high school test" was ranked 18th by teachers and 6th by students. Some implications of these differences are discussed, and it is concluded that the teacher needs to understand the student's motives in order to modify the program so that the desired objectives will be reached.

SUBJECT AREA(S)

Motivating factors of adult basic education students and how they affect ABE teachers and their programs are the subject areas.

INTENDED USERS AND BENEFICIARIES

The intended users of this program are teachers of ABE and administrators of ABE programs.

GOAL(S) OR PURPOSE(S)

This paper is one of a series which is intended to provide a popularized overview of inservice education to serve as a current awareness publication for educators.

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RD 200 051

MICROTEACHING: HISTORY AND PRESENT STATUS

A state-of-the-art paper summarizing the history and uses of microteaching

This state-of-the-art paper summarizes the history of microteaching's development and its rationale, the many uses of microteaching, and the research evidence of microteaching—a training procedure which has become an established element in the programs of many colleges, universities, and school districts in the education of various groups of educational personnel (e.g., preservice teachers, inservice teachers, counselors, supervisors, and college teachers). Although the authors make the distinction between microteaching (a teaching situation scaled down in terms of time, number of students, number and specificity of teaching skills focused on, and the opportunity offered for immediate feedback in some form), and simulation (which uses the same process and the same teach-critique/reteach-critique cycle, but which, unlike microteaching, involves peer-group students, rather than "real" ones), they recognize that the latter is by far the more common practice in preservice education. Emphasis of the research summary is on empirically based, rather than experientially based, studies of behavioral change and on areas related to both teaching skills and training protocols in which a great deal of further research is needed. Included with the document are a list and explanation of 15 specific teaching skills and an annotated bibliography.

SUBJECT AREA(S)

This state-of-the-art paper summarizes the history of microteaching's development and its rationale, the many uses of microteaching, and the research evidence on microteaching.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teacher educators in colleges, universities, and school districts.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to give the reader an overview of microteaching—a training procedure which has become an established element in the programs of many colleges, universities, and school districts.

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Dwight W. Allen

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 052

MICROTEACHING: SELECTED PAPERS

A report on three microteaching programs

This is the second of a series of three bulletins dealing with "Supervisory Strategies in Clinical Experiences." The first of the two papers, *Microteaching: History and Present Status* by James M. Cooper and Dwight W. Allen, begins with a definition of microteaching as a teaching situation which is scaled down in terms of time and numbers of students but which is not synonymous with simulated teaching, as the teacher, students, and lesson are all "real." The history of microteaching from its development in 1963 is outlined, followed by an explanation of the rationale, the uses of microteaching in preservice and inservice training in the Peace Corps, counseling, supervisor training, and the training of college teachers. Research evidence on the effectiveness of microteaching is examined and the teaching skills involved are listed. There is a bibliography of 58 items. The second paper, *Microteaching in Teacher Education Programs* by Robert F. Schuck, considers three programs: (1) The original Stanford Teacher Education Project, which developed nine specific technical skills in secondary education; (2) the Brigham Young University Program, which forms part of the preservice curriculum; and (3) the San Jose State College Study of that institution's program for elementary intern teachers. A brief concluding section suggests that microteaching holds promise as a research strategy for investigators interested in patterns of instruction.

SUBJECT AREA(S)

This report deals with the history and present status of microteaching, and considers three programs in microteaching.

INTENDED USERS AND BENEFICIARIES

The intended users of this report are teacher educators involved in preservice education.

GOAL(S) OR PURPOSE(S)

The purpose of this report is to inform readers of the history and present status of microteaching and to give examples of some microteaching programs.

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RD 200 053

PARSING THE PARADOX: ASSURING QUALITY IN SCHOOL PERSONNEL PREPARATION

A preparation of problems involved in changing teacher certification

Despite recent calls for changes in teacher certification, there are many questions to be considered before changes are made. Some of these questions are: What are the basic qualities and abilities that a teacher must have? Who will decide on these qualities and abilities? How will they be measured? Who needs to be certified? The trend toward accountability and performance criteria for certification is an encouraging step, but it is just a step. Such an approach needs further consideration in order to develop a rationale and workable procedures. Another change being demanded is to give teachers control over entry into the profession. This too is a good idea, but before teachers can be given such control they must present a feasible plan. There are many other problems and paradoxes which complicate the issue of teacher certification, such as the conflict between human and intellectual values, student attitudes toward education, and efforts to recruit minority group members into teaching while still maintaining high standards.

SUBJECT AREA(S)

This document deals with problems involved in changing teacher certification.

INTENDED USERS AND BENEFICIARIES

The intended users are all persons involved in teacher certification.

GOAL(S) OR PURPOSE(S)

The goal is to present the problems that might be involved in implementing change in teacher certification.

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RD 200 054

PERFORMANCE-BASED CERTIFICATION OF SCHOOL PERSONNEL

A consideration of techniques needed for determining an individual's ability to teach in the public schools and to qualify for certification

The 1970 Miami Beach training sessions for national leaders in teacher education was conducted by the Florida Department of Education at the invitation of the U.S. Office of Education. The purpose of the sessions was to consider the necessary techniques for determining an individual's ability to perform as a teacher in public schools and to qualify for certification. The document is in three parts. Part 1 contains five papers on performance-based certification: Describing the concept and why it is needed; discussing participation in decisionmaking; giving an overview of current approaches to accountability; considering whether the focus should be on knowledge, teacher behavior, or pupil achievement; and considering the role of differentiated staffing. Part 2 details the plans for changing certification procedures, with notes on forces which are helping or hindering selected organizations and State agencies. Part 3 considers the impact performance criteria will have on teacher certification in substituting demonstrated teaching ability for evidence of having followed an approved program of studies.

SUBJECT AREA(S)

Performance-based certification.

INTENDED USERS AND BENEFICIARIES

Those persons involved in teacher certification.

GOAL(S) OR PURPOSE(S)

To consider the techniques needed for using performance criteria to determine an individual's ability to perform as a teacher and qualify for certification.

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PROFESSIONAL LABORATORY EXPERIENCES AT THE PRESERVICE LEVEL

*A theoretical analysis of the definition, role,
and purpose of preservice laboratory services*

This monograph presents a completely theoretical analysis of data pertaining to professional laboratory experiences at the preservice level. The intention is to bring together in a useful pattern what is known and what is asserted about these experiences and to make specific functional proposals that, if implemented, may be conducive to enhancing the quality of professional laboratory experiences. The document is divided into discussions of the definition of professional laboratory experiences; their purpose, their role; the characteristics of high-quality professional laboratory experiences; principles which should govern them; theory; educational concepts underlying them; types (directed observation, participation, and student teaching); range; facilities; and forward-looking developments. A bibliography is included.

SUBJECT AREA(S)

The definition, role, and purpose of professional preservice laboratory experiences are the subjects of this publication.

INTENDED USERS AND BENEFICIARIES

This publication is intended for all elementary, secondary, and collegiate personnel responsible for improving school personnel preparation.

GOAL(S) OR PURPOSE(S)

The purpose of this publication is to analyze and interpret contemporary practices and perspectives.

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RD 200 056

PROGRAMMATIC DEVELOPMENT OF IN-SERVICE TEACHER EDUCATION

A discussion of teacher development via teacher centers, instructional training centers, and specialized workshops

A "programmatic concept" of inservice education is suggested. Inservice activity, congruent with the concept must emerge from an operational complex which has demonstrated the capability to create and/or diffuse instructional programs targeted to a group of teachers with particular needs. Three approaches which fit the criterion rule are described: (a) Inservice education as a programmatic activity of teacher education centers, (b) inservice education as a product of specialized instructional and curriculum product/training centers, and (c) inservice education as disseminated through specialized workshops. Examples which fit each of the three approaches are presented. A 29-item annotated bibliography is included.

SUBJECT AREA(S)

Development of inservice training for teachers via teacher centers, curriculum and instructional product/training centers, and specialized workshops is the subject of this product.

INTENDED USERS AND BENEFICIARIES

The intended users are the school district supervisors of inservice education and collegiate personnel involved as resource persons.

GOAL(S) OR PURPOSE(S)

This paper is part of a series designed to provide an overview of inservice teacher education derived from the literature.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Marvin Pasch

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975

PROMISING PRACTICES IN THE TRAINING AND RENEWAL OF TEACHER EDUCATORS

A variety of trends and programs in preservice and inservice teacher educator training

This monograph reviews a variety of trends and programs in the preservice and inservice training of teacher educators. Diversified instructional formats are discussed, as represented in the Keller plan, directed study, the Stanford catalog of teacher training products, and protocol materials. The methods of computer-assisted instruction and the use of consulting groups (as in the Minnesota "Field-Plot" model and the western Kentucky model) are also explored as vehicles that are being used to train teacher educators. Finally, the implications of competency-based teacher education and of alternative teacher education programs for the training of teacher educators are revealed. A 25-item bibliography concludes the paper.

SUBJECT AREA(S)

Trends for the improvement of inservice teacher education programs; implications of performance based teacher education for inservice education.

INTENDED USERS AND BENEFICIARIES

Teacher educators and administrators of teacher education.

GOAL(S) AND PURPOSE(S)

The purpose of this product is to delineate the potentialities for improving collegiate-based educational personnel development.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Kenneth Howey

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 058

PROTOCOL MATERIALS: TRAINING MATERIALS FOR UNITING THEORY AND PRACTICE

A paper on history, theory, practice, and evaluation of protocol materials

This publication brings together seven papers by writers who have been extensively involved in the preparation and use of protocol materials in teacher education. These papers are "Protocol Materials: Historical Notes on Protocols Development" by Doris V. Gunderson, "The Protocol Materials Movement: An Exemplar of Efforts to Wed Theory and Practice in Teacher Education" by Donald R. Cruickshank, "The University of Colorado Protocol Project: A Case Study" by Celeste P. Woodley and Laura A. Driscoll, "A Catalogue of Concepts in the Pedagogical Domain of Teacher Education" by Bryce B. Hudgins, "The Protocol Materials Program" by Donald E. Orlosky, "A Protocol Materials Evaluation: The Language of Children" by Victor M. Rentel, and "A Survey of Protocol Materials Evaluation" by John E. Cooper.

SUBJECT AREA(S)

This paper focuses on various aspects of protocol materials including history, theory, practice, and evaluation.

INTENDED USERS AND BENEFICIARIES

The publication is aimed at teacher educators.

GOAL(S) OR PURPOSE(S)

The goal of this paper is to analyze and synthesize information about protocol materials.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Joel L. Burdin, Author
Donald R. Cruickshank, Author

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975 ■

A READER'S GUIDE TO THE COMPREHENSIVE MODELS FOR PREPARING ELEMENTARY TEACHERS

A guide to preservice teacher education models

This document consists of guides to models for preparing elementary teachers. The nine models included in the document are:

1. "A Guide to a Model of Teacher Training for the Individualization of Instruction"
2. "A Guide to Model Elementary Teacher Education Program"
3. "A Guide to Educational Specifications for a Comprehensive Elementary Teacher Education Program"
4. "A Guide to Georgia Educational Model Specifications for the Preparation of Elementary Teachers"
5. "A Guide to the Teacher-Innovator: A Program to Prepare Teachers"
6. "A Guide to Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers"
7. "A Guide to a Competency-Based Field-Centered Systems Approach to Elementary Teacher Education"
8. "A Guide to Behavioral Science Elementary Teacher Education"
9. "A Guide to a Model for the Preparation of Elementary School Teachers."

SUBJECT AREA(S)

Preservice teacher education models is the subject area.

INTENDED USERS AND BENEFICIARIES

The intended users of this document are teacher educators.

GOAL(S) OR PURPOSE(S)

The purpose of this document is to provide a compilation of elementary teacher education models.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education

American Association of Colleges for Teacher Education
One Dupont Circle NW.
Washington, D.C. 20036

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 060

SCHOOL-COLLEGE RELATIONS IN PREPARING SCHOOL PERSONNEL

An analysis of the school-college relationship in preparing school personnel

This monograph analyzes the current situation in the school-college relationship in preparing school personnel and suggests some future developments. The growth of this cooperation is traced from its tentative beginnings in the early years of the century to the much greater activity of the 1960's. The rationale for cooperation and partnership is examined and five of the common forms of partnership are described: Internship, teacher centers, laboratory centers, regional councils, and partnership at State level. The author then considers some of the issues and problems involved in the current situation, as well as the promising developments, including the increasing participation of State departments of education and teacher unions and associations. Four probable future developments are identified as: (1) Greater emphasis on partnership at the State level, (2) an increasing participation by teacher organizations, (3) the development of the teaching center as the clinical dimension of teacher education, and (4) a greatly increased student participation in the decisionmaking structure.

SUBJECT AREA(S)

This monograph analyzes the current situation in school-college relationships in preparing school personnel and suggests some future developments.

INTENDED USERS AND BENEFICIARIES

The intended users of this monograph are teacher educators at both the school and college levels.

GOAL(S) OR PURPOSE(S)

The purpose of this monograph is to inform the reader of the history, current status, and future possibilities of the school-college relationship in preparing school personnel.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
One Dupont Circle NW., Suite 616
Washington, D.C. 20036

Hans C. Olsen

AVAILABILITY

Order No. ED 048 124, $0.76 (microfiche), $3.32 (paper), add $0.18 (postage). Order from:

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INFORMATION CURRENT AS OF APRIL 1975 ■

SIMULATION AS AN INSTRUCTIONAL ALTERNATIVE IN TEACHER EDUCATION

An examination of the field of simulation as an instructional alternative in teacher education

This paper brings together and examines several of the better known developments in the field of simulation as an instructional alternative in teacher education. Six examples of simulation in preservice and inservice teacher education are described. Each description includes information on the purpose and form of the simulation, how to use it, its specific advantages and drawbacks, and whom to contact for further information. The six examples are: (1) Classroom simulator; (2) teaching problems laboratory; (3) Project Insite; (4) low-cost instructional simulation; (5) human relations, one dimension of teaching; and (6) inner-city simulation laboratory. The booklet discusses the general advantages of simulation and the specific advantages of using it in conjunction with student teaching, as part of the college-based teacher education program and in inservice and graduate education. The report also outlines briefly several questions which should be considered in deciding whether to use a particular simulation.

SUBJECT AREA(S)

This paper brings together and examines several developments in the field of simulation as an instructional alternative in teacher education.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are those involved in inservice and preservice teacher education.

GOAL(S) OR PURPOSE(S)

The purpose of this paper is to describe simulation as an instructional alternative for teacher educators.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Donald R. Cruickshank
Association of Teacher Educators
1701 K St. NW., Suite 1201
Washington, D.C. 20036

AVAILABILITY

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Arlington, Va. 22210

INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 062

SIMULATION IN PREPARING SCHOOL PERSONNEL

An overview of how simulation relates to the professional preparation of school personnel

The purpose of this state-of-the-art paper is to provide an overview of simulation ("a representation of several variables in the same arrangement as they occur in a particular natural or artificial system"), particularly as it relates to the professional preparation of school personnel. After distinguishing between "simulation" and "simulation games" (the primary, although admittedly tenuous, distinction being that the latter usually involves interpersonal or team competition), the authors summarize simulation-based practice and theory under the following headings: (1) The design and development of instructional simulation in professional education, (2) the uses of instructional simulation in professional education (which includes both general uses and specific examples), (3) some issues to be resolved (which identify 11 controversial areas), (4) advantages of simulation, (5) disadvantages of simulation, and (6) questions in need of research. The use of simulation as a training methodology is becoming increasingly widespread and has considerable educational potential if properly designed, utilized, and evaluated. A great deal of research remains to be done if the effectiveness of the technique is to be empirically validated and educationally proven. A 130-item bibliography is included.

SUBJECT AREA(S)

This state-of-the-art paper presents an overview of simulation, particularly as it relates to the professional preparation of school personnel.

INTENDED USERS AND BENEFICIARIES

The intended users of this program are those involved in preparing school personnel.

GOAL(S) OR PURPOSE(S)

The purpose of this program is to present an overview of simulation, particularly as it relates to the professional preparation of school personnel.

DEVELOPER/AUTHOR:

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Donald R. Cruickshank
Frank W. Broadbent

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975■

STRUCTURED CAREER DEVELOPMENT FROM TEACHER AIDE AND BEYOND

A description of implementation of career ladders and advancement programs for school paraprofessionals

In the first of the two papers in this monograph, the author describes the concepts of career ladders and career lattices for paraprofessionals in education and the ways in which these concepts have been implemented in the past few years. Various aspects of implementation are examined, including functions performed, requirements for advancement, training, compensation, recruitment and selection, evaluation, and credentials and certification. Because this is a relatively new development in education, some potential problems are considered, with suggested strategies for dealing with them. Finally, the various benefits resulting from a career ladder and paraprofessional program are discussed as they apply to the student, the paraprofessional, the professional, the institution, and the community. The second paper describes, in more detail, the career opportunities program of the U.S. Office of Education. The operation of the program is discussed, and trends for the future are considered, including the use of differentiated staffs in team teaching and informal classrooms, the role of State agencies, revisions in teacher certification, the increased use of local funds, the effect of career lattices on school salary structure, and modifications in teacher training programs. There are four appendixes and a bibliography.

SUBJECT AREA(S)

The subject areas include problems, strategies, and benefits in the development and implementation of career ladders and advancement programs for school paraprofessionals.

INTENDED USERS AND BENEFICIARIES

The publication was created to be useful to preservice and inservice teachers and administrators, as well as to teachers of teachers.

GOAL(S) OR PURPOSE(S)

A most significant development in education has been the addition of paraprofessionals to the school team—with implications for the professional training sequence, for servicing children and youth better, and for relating school and community social and educational needs. This paper is intended to shed light on this development.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Garda W. Bowman and Wilton Anderson

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 064

A SYNTHESIS OF RESEARCH AND INNOVATION IN PROGRAMS FOR THE FURTHER DEVELOPMENT OF TEACHERS OF ADULTS

A description of eight projects concerned with program innovation for adult learners

ERIC and other literature on innovative programs for the further development of teachers of adults have been identified. Experts in the development of teachers of adults were canvassed for nominations of current programs of high merit. Eight projects were singled out for specific description in order to acquaint the reader with the structure and processes involved in program innovation for adult learners. The review constitutes a synthesis of literature and project reports organized to give those engaged in the preservice and inservice improvement of teachers of adults new goals and procedures.

SUBJECT AREA(S)

This manuscript discusses development of teachers of adults.

INTENDED USERS AND BENEFICIARIES

The intended users of this program are professors of adult and continuing education, and principals and supervisors of schools for adult learners.

GOAL(S) OR PURPOSE(S)

The goals of this program are to assemble and report the best practice in improving teachers of adults and to provide models of good practice which others may consider for adaptation and/or adoption.

ASSURANCES AND CLAIMS

Prior to completion, the manuscript was submitted to more than 12 practitioners, policymakers, and professors of adult education for critical review and determination of professional competence. Their comments were incorporated as appropriate.

DEVELOPER/AUTHOR:

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David V. Tiedeman, Principal Investigator
Stanley M. Grabowski, Project Director and Author

AVAILABILITY

A Synthesis of Research and Innovation in Programs for the Further Development of Teachers of Adults **is in progress. To date, the research has been completed, and a preliminary draft has been prepared. The draft is undergoing review before final editing and production. The final report is expected to be published by May 1975.**

INFORMATION CURRENT AS OF MARCH 1975 ■

TEACHING CENTERS: TOWARD THE STATE OF THE SCENE

An overview of different teacher center concepts

This monograph is intended: (1) To outline the background and current extent of teacher centering in the United States, (2) to stimulate intercenter communication, (3) to identify resources for potential program developers, (4) to raise some developmental problems and issues confronting center builders, and (5) to provide a framework for a systematic analysis of the nature and promise of the teaching center concept. After a brief discussion of the problems of naming these projects, the authors identify some roots of the movement. This is followed by an analysis of the extent and nature of teaching centers, which is based on a survey conducted by Syracuse University and includes 18 selected summary tables from that survey. A typology of teaching centers identifies seven organizational types and four functional types. Five major issues for center developers are listed, followed by 25 questions arising from them. Current resources listed include 14 national progams and 46 exemplary centers. A 152-item bibliography is included.

SUBJECT AREA(S)

This document focuses on various aspects of teacher centers, including facilities, costs, evaluation methods, and governance.

INTENDED USERS AND BENEFICIARIES

The intended users of this monograph are teacher educators and institutions, especially those involved with or considering teacher center programs.

GOAL(S) OR PURPOSE(S)

This document contains an overview of diverse teacher center concepts and a synthesis of current thought on the topic.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Leadership Training Institute for Educational Personnel Development
University of South Florida
Tampa, Fla. 33620

Allen Schmieder
Sam J. Yarger

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INFORMATION CURRENT AS OF APRIL 1975 ■

RD 200 066

TOWARD A HUMANE CURRICULUM

Six aspects of "humaneness" are discussed and applied to curriculums in this paper

This paper is a revision of a presentation to the American Educational Research Association in April 1974. The author applies the term "humane" to the design of educational experiences. Six aspects of "humaneness"—intellectual, emotional, social, physical, aesthetic, and spiritual—are discussed and applied to the curriculum. Three goals of teaching are also stated. These goals and the 6 humane qualities are combined in a grid, which shows 18 different combinations of teaching pedagogy and human behavior that need to be present if a curriculum is to be humane. Development of the grid leads to the central proposition of the paper: "In order to achieve a humane curriculum, each subject matter and each experience must be responsive to all the aspects of the human condition, in the context of all the pedagogical intentions the teacher has."

SUBJECT AREA(S)

Subject areas include curriculum development, humanistic education, and philsosphy of education.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teachers of all subject areas and all grade levels, curriculum developers and decisionmakers, and teacher trainers (inservice and preservice).

DEVELOPER/AUTHOR:

ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS)
855 Broadway
Boulder, Colo. 80302

Arthur W. Foshay, Author

AVAILABILITY

Copies are available for $0.90 from the developer:
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colo. 80302

INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 067

UNIQUE CHALLENGES OF PREPARING TEACHERS FOR INNER-CITY SCHOOL: PROGRESS AND PROSPECTS

A paper on the history of and prospects for inner-city teacher education

During the 1960's, there was growing awareness that without competent teachers who understand the problems of ghetto life, further deterioration of the educational process was virtually assured. The first half of this paper traces the growth of this awareness through the writings of leading educators and through an examination of teacher education programs which were established to implement their proposals. These include Project 120 at Hunter College, the Associated Colleges of the Midwest Urban Semester Program, the Inner-City Teacher Education Project in Missouri, the Syracuse University Urban Teacher Preparation Program, the Inter-Institutional Program Development Project, the Sausalito Teacher Education Project (STEP), and the Cooperative Urban Teacher Education Program (CUTE). The second part of the paper deals with future prospects for inner-city teacher education and examines the challenges facing the teacher, economic factors affecting teacher supply and demand, and the desirable characteristics of inner-city teachers. The need for exposure to inner-city conditions during training is emphasized, as are the problems of language and communication, reading skills, individualized instructions, and the increased use of paraprofessional personnel.

SUBJECT AREA(S)

This paper concerns itself primarily with the training of the urban teacher, the history of such efforts, and future prospects.

INTENDED USERS AND BENEFICIARIES

The intended users of this paper are teachers, school administrators, and teacher educators concerned with improving the lives of those in the inner-city through education.

GOAL(S) OR PURPOSE(S)

This paper traces the history of a proliferation of efforts concerning the inner city, which serves as a basis for emerging programs and deals with future prospects for inner-city teacher education.

DEVELOPER/AUTHOR:

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Washington, D.C. 20036

Mid-Continent Educational Laboratory
104 East Independence Ave.
Kansas City, Mo. 64106

Grant M. Clothier
Bryce B. Hudgins

AVAILABILITY

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INFORMATION CURRENT AS OF MARCH 1975 ■

RD 200 068

UTILIZATION OF INFORMATION RESOURCES IN PLANNING TEACHER PROFESSIONAL PREPARATION PROGRAMS

A publication providing teacher educators, educational innovators, and decisionmakers with resources to manage change

This publication is designed to provide teacher educators and educational innovators and decisionmakers with information that will help them to manage change. In the 1st section, "Pressures for Change," societal and reform pressures are identified. The 2d section, "The Institutional Imperatives," discusses finance, facilities, and curriculum as the major areas of institutional activity affecting planning for teacher education. In the 3d section, "A Macrosystem for Information Utilization," an ideal dissemination and utilization system is outlined. The 4th section, "Some Major Information Resources for Planning Teacher Education," has three subsections: (a) "The Research World, Basic and Applied Research and Development"; (b) "The Practice World: Practice Professions, Product Organizations, and Service Organizations"; and (c) "The Consumer and Government as Protector of Consumer Interest." Each citation in section 4 includes: Name of organization, address and telephone number, areas of interest, holdings, publications, and information services.

SUBJECT AREA(S)

This document focuses mainly on the management of change in teacher education.

INTENDED USERS AND BENEFICIARIES

The intended audience for this publication includes faculty members of all institutions with teacher preparation programs, elementary and secondary teachers, and cooperating teachers.

GOAL(S) OR PURPOSE(S)

The purpose of this monograph is to provide information of particular significance to small developing institutions.

DEVELOPER/AUTHOR:

ERIC Clearinghouse on Teacher Education
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Washington, D.C. 20036

Donald E. Hawkins
Marian F. Bendixsen

AVAILABILITY

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INFORMATION CURRENT AS OF APRIL 1975 ■

INDEXES

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SUBJECT INDEX

This index lists product titles within the 20 subject areas of the *Catalog*. Since products cut across fields and defy simple classification, the user is advised to review multiple subject areas to identify products of interest. For example, some Basic Skills products are located in the Early Childhood Education or Educational Equity sections when their primary focus lies in these areas. Similarly, some Career Education products are included in the Guidance and Counseling section.

The following list shows the subject areas in the *Catalog*, by volume number, RD number range, and page range:

VOLUME 1

SUBJECT AREA	RD NO. RANGE	PAGE RANGE
Aesthetic Education	010 001-010 044	11 to 138
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Reading and Language Arts	030 001-030 041	253 to 357
Reasoning and Problem Solving	040 001-040 018	363 to 407
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Administration and Staff Development	060 001-060 029	559 to 611
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VOLUME 2

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Multicultural/Bilingual	110 001-110 059	787 to 939
Sex Fairness	120 001-120 009	943 to 959
Evaluation, Measurement and Needs Assessment	130 001-130 044	967 to 1056
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Guidance and Counseling	150 001-150 011	1179 to 1190
Information Utilization and Dissemination	160 001-160 024	1195 to 1240
Postsecondary Education	170 001-170 031	1247 to 1292
Social Education	180 001-180 021	1301 to 1346
Social Science	190 001-190 017	1347 to 1365
Teacher Education	200 001-200 068	1373 to 1476

Within a subject area, product titles (with RD identification numbers) are listed alphabetically as shown in the examples below:

Aesthetic Education

The Actor (Part of the Aesthetic Education Program)
RD 010 016

Aesthetic Education Learning Centers (Part of the Aesthetic Education Program)
RD 010 041

Aesthetics in the Everyday World (Working Title) and Shapes (Television Programs) (Part of the Aesthetic Education Program)
RD 010 042

Analyzing Characterization (Part of the Aesthetic Education Program)
RD 010 024

The Architect (Part of the Aesthetic Education Program)
RD 010 017

Arranging Sounds With Magnetic Tapes (Part of the Aesthetic Education Program)
RD 010 025

Arts/Parts: Perceiving and Analyzing the Arts (Part of the Aesthetic Education Program)
RD 010 037

The Choreographer (Part of the Aesthetic Education Program)
RD 010 018

The Composer (Part of the Aesthetic Education Program)
RD 010 019

Constructing Dramatic Plot (Part of the Aesthetic Education Program)
RD 010 026

Creating Characterization (Part of the Aesthetic Education Program)
RD 010 027

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Aesthetic Education

The Actor (Part of the Aesthetic Education Program) **RD 010 016**

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The Choreographer (Part of the Aesthetic Education Program) **RD 010 018**

The Composer (Part of the Aesthetic Education Program) **RD 010 019**

Constructing Dramatic Plot (Part of the Aesthetic Education Program) **RD 010 026**

Creating Characterization (Part of the Aesthetic Education Program) **RD 010 027**

Creating With Sounds and Images (Part of the Aesthetic Education Program) **RD 010 028**

Creating Word Picture (Part of the Aesthetic Education Program) **RD 010 029**

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The Critical Audience (Part of the Aesthetic Education Program) **RD 010 020**

Dramatic Conflict (Part of the Aesthetic Education Program) **RD 010 005**

Examining Point of View (Part of the Aesthetic Education Program) **RD 010 030**

The Filmmaker (Part of the Aesthetic Education Program) **RD 010 021**

The Five Sense Store (Part of the Aesthetic Education Program) **RD 010 043**

Forming With Movement (Part of the Aesthetic Education Program) **RD 010 031**

How Does a Rainbow Feel? An Introduction to Aesthetic Education **RD 010 039**

Introduction to Light (Part of the Aesthetic Education Program) **RD 010 001**

Introduction to Motion (Part of the Aesthetic Education Program) **RD 010 002**

Introduction to Sound (Part of the Aesthetic Education Program) **RD 010 003**

Introduction to Space (Part of the Aesthetic Education Program) **RD 010 004**

Making Sounds into Patterns (Part of the Aesthetic Education Program) **RD 010 032**

Movement (Part of the Aesthetic Education Program) **RD 010 006**

Non-Verbal Communication (Part of the Aesthetic Education Program) **RD 010 007**

Part and Whole (Part of the Aesthetic Education Program) **RD 010 008**

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Relating Sound and Movement (Part of the Aesthetic Education Program) **RD 010 034**

Rhythm/Meter (Part Of the Aesthetic Education Program) **RD 010 009**

Setting and Environment (Part of the Aesthetic Education Program) **RD 010 010**

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SWRL Elementary Art Program **RD 010 035**

SWRL Music Program **RD 010 036**

SWRL Song Retrieval System **RD 010 044**

Texture (Part of the Aesthetic Education Program) **RD 010 014**

Tone Color (Part of the Aesthetic Education Program) **RD 010 015**

The Visual Artist (Part of the Aesthetic Education Program) **RD 010 022**

What Do You Say After You Say "I Like It"? A Method of Aesthetic Perception (Part of the Aesthetic Education Program) **RD 010 040**

Writers, Poets, Storytellers, and Playwrights (Part of the Aesthetic Education Program) **RD 010 023**

Basic Skills
Mathematics and Science

Carrying and Borrowing Parent Teaching Package **RD 020 024**

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Opening Institutional Ledger Books—A Challenge to Educational Leadership. Suggestions for Talking to School-Community Groups About Testing and Test Results: ERIC/TM Report 28 RD 130 041

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Economic and Career Awareness: A RD 070 013

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Instructional Handbook: Coping in the World of Work. Practice in Problem Solving (CPSS) (A Product of CPSS, the Career Planning Support System) RD 080 018

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Module Development Handbook (A Product of the Performance-Based Professional Education Curricula Program) RD 060 015

Myself and Others at Home and School RD 080 019

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An Orientation to Career Education—Group Approach RD 060 006

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Unique Challenges of Preparing Teachers for Inner-City School: Progress and Prospects
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RD 170 031

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MEDIA INDEX

This index shows, in chart form, the variety and type of media required for using each of the 660 products in the *Catalog*. It lists the products by subject area in the order of their appearance in the *Catalog*, according to the following media categories:

- Book or Other Reading Material
- Film/Filmstrip
- Motion Picture
- Slides
- Transparencies
- Cassette
- Record
- Video Tape
- Computer
- Computer Terminal
- Miscellaneous (See Product Description)

A Miscellaneous category is included for those products requiring such varied "manipulables" as scissors, crayons, or Styrofoam blocks. *Catalog* users are referred to the Materials and Equipment section of the product description for specific information.

The Computer and Computer Terminal categories are included for those products requiring different types of computer software. The software for products marked "Computer" requires a computer hardware system using a batch (computer code) process mode. The software for products marked "Computer Terminal" may be used in an interactive mode.

The RD identification number appears to the right of the product title as in the examples below:

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
Aesthetic Education												
Introduction to Light (Part of the Aesthetic Education Program)	RD 010 001	X	X									X
Introduction to Motion (Part of the Aesthetic Education Program)	RD 010 002											X
Introduction to Sound (Part of the Aesthetic Education Program)	RD 010 003	X					X					X
Introduction to Space (Part of the Aesthetic Education Program)	RD 010 004	X	X									X
Dramatic Conflict (Part of the Aesthetic Education Program)	RD 010 005	X	X									X
Movement (Part of the Aesthetic Education Program)	RD 010 006			X								X
Non Verbal Communication (Part of the Aesthetic Education Program)	RD 010 007	X		X		X	X					X
Part and Whole (Part of the Aesthetic Education Program)	RD 010 008	X	X									X
Rhythm/Meter (Part of the Aesthetic Education Program)	RD 010 009	X						X				X
Setting and Environment (Part of the Aesthetic Education Program)	RD 010 010	X	X			X	X					
Shape (Part of the Aesthetic Education Program)	RD 010 011	X										X
Shape Relationships (Part of the Aesthetic Education Program)	RD 010 012	X										X
Shapes and Patterns (Part of the Aesthetic Education Program)	RD 010 013	X										X
Texture (Part of the Aesthetic Education Program)	RD 010 014	X			X							X
Tone Color (Part of the Aesthetic Education Program)	RD 010 015	X	X	X				X				X

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Aesthetic Education												
Introduction to Light (Part of the Aesthetic Education Program)	RD 010 001	X	X									X
Introduction to Motion (Part of the Aesthetic Education Program)	**RD 010 002**											X
Introduction to Sound (Part of the Aesthetic Education Program)	RD 010 003	X					X					X
Introduction to Space (Part of the Aesthetic Education Program)	**RD 010 004**	X	X									X
Dramatic Conflict (Part of the Aesthetic Education Program)	RD 010 005	X	X									X
Movement (Part of the Aesthetic Education Program)	**RD 010 006**			X								X
Non Verbal Communication (Part of the Aesthetic Education Program)	RD 010 007	X		X		X	X					X
Part and Whole (Part of the Aesthetic Education Program)	**RD 010 008**	X	X									X
Rhythm/Meter (Part of the Aesthetic Education Program)	RD 010 009	X						X				X
Setting and Environment (Part of the Aesthetic Education Program)	**RD 010 010**	X	X			X	X					
Shape (Part of the Aesthetic Education Program)	RD 010 011	X										X
Shape Relationships (Part of the Aesthetic Education Program)	**RD 010 012**	X										X
Shapes and Patterns (Part of the Aesthetic Education Program)	RD 010 013	X										X
Texture (Part of the Aesthetic Education Program)	**RD 010 014**	X			X							X
Tone Color (Part of the Aesthetic Education Program)	RD 010 015	X	X	X				X				X
The Actor (Part of the Aesthetic Education Program)	**RD 010 016**	X	X				X					X
The Architect (Part of the Aesthetic Education Program)	RD 010 017	X					X					X
The Choreographer (Part of the Aesthetic Education Program)	**RD 010 018**	X					X					X
The Composer (Part of the Aesthetic Education Program)	RD 010 019	X					X					X
The Critical Audience (Part of the Aesthetic Education Program)	**RD 010 020**											X
The Filmmaker (Part of the Aesthetic Education Program)	RD 010 021	X	X				X					X
The Visual Artist (Part of the Aesthetic Education Program)	**RD 010 022**	X	X				X					X
Writers, Poets, Storytellers, and Playwrights (Part of the Aesthetic Education Program)	RD 010 023	X	X				X					X
Analyzing Characterization (Part of the Aesthetic Education Program)	**RD 010 024**	X					X					X
Arranging Sounds With Magnetic Tapes (Part of the Aesthetic Education Program)	RD 010 025	X					X					X
Constructing Dramatic Plot (Part of the Aesthetic Education Program)	**RD 010 026**	X										X
Creating Characterization (Part of the Aesthetic Education Program)	RD 010 027	X	X									X
Creating With Sounds and Images (Part of the Aesthetic Education Program)	**RD 010 028**	X	X		X		X					X
Creating Word Pictures (Part of the Aesthetic Education Program)	RD 010 029	X										X
Examining Point of View (Part of the Aesthetic Education Program)	**RD 010 030**	X										X
Forming With Movement (Part of the Aesthetic Education Program)	RD 010 031	X										
Making Sounds into Patterns (Part of the Aesthetic Education Program)	**RD 010 032**	X					X					X
Perceiving Sound Word Patterns (Part of the Aesthetic Education Program)	RD 010 033	X					X					X
Relating Sound and Movement (Part of the Aesthetic Education Program)	**RD 010 034**	X		X				X				X
SWRL Elementary Art Program	RD 010 035	X	X									X
SWRL Music Program	**RD 010 036**	X	X				X					X
Arts/Parts: Perceiving and Analyzing the Arts (Part of the Aesthetic Education Program)	RD 010 037	X					X					
The Creative Process (Part of the Aesthetic Education Program)	**RD 010 038**											X
How Does a Rainbow Feel? An Introduction to Aesthetic Education	RD 010 039			X								X
What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception (Part of the Aesthetic Education Program)	**RD 010 040**	X										X

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Aesthetic Education—Continued												
Aesthetic Education Learning Centers (Part of the Aesthetic Education Program)	RD 010 041	X										X
Aesthetics in the Everyday World (Working Title) and Shapes/(Television Programs)/(Part of the Aesthetic Education Program)	RD 010 042											X
The Five Sense Store (Part of the Aesthetic Education Program)	RD 010 043	X			X		X					X
SWRL Song Retrieval System	RD 010 044	X								X	X	
Basic Skills: Mathematics and Science												
Stories by Frederique (Part of the Comprehensive School Mathematics Program)	RD 020 001	X										
Films of Twelve Demonstration Classes Taught by Frederique (Part of the Comprehensive School Mathematics Program)	RD 020 002			X								
An Introduction to Mathematics of Grades K to 2 (Part of the Comprehensive School Mathematics Program)	RD 020 003	X										
CSMP Elementary School Program (K-3) (Part of the Comprehensive School Mathematics Program)	RD 020 004	X										X
A Short Course in Probability (Part of the Comprehensive School Mathematics Program)	RD 020 005	X										X
Elements of Mathematics (EM) Program (Part of the Comprehensive School Mathematics Program)	RD 020 006	X										X
Mathematics Activity Package I (MAP I)/(May be used with MAPs II and III of the Exploring Number Concepts Program)	RD 020 007	X	X				X					X
Mathematics Activity Package II (MAP II)/(May be used with MAPs I and III of the Exploring Numbers Concepts Program)	RD 020 008	X	X				X					X
Mathematics Games Package (May be used with Exploring Numbers Concepts, MAPs II and III)	RD 020 009	X										X
Mathematics Music Package	RD 020 010	X					X					
Functions Puzzles Computer Assisted Instruction Program (FUNPUZ)	RD 020 011	X								X	X	
Math Functions Computer Assisted Instruction Program (Math Functions)	RD 020 012	X								X	X	X
Number Facts Computer Assisted Instruction Program (Number Facts)	RD 020 013									X		
Word Problems Computer Assisted Instruction Program (Word Problems)	RD 020 014	X								X	X	
Developing Mathematical Processes	RD 020 015	X										
Individualized Mathematics	RD 020 016	X										X
Individually Prescribed Instruction in Mathematics (IPI), Edition II	RD 020 017	X					X					X
Individualized Middle Mathematics (IMM), Levels I and II	RD 020 018	X										X
Metric Measurement	RD 020 019	X	X				X					
Individualized Learning for Adults - Mathematics	RD 020 020	X										X
Number Skills Parent Teaching Package	RD 020 021	X										X
Math Combinations - Addition Parent Teaching Package	RD 020 022	X										X
Math Combinations - Subtraction Parent Teaching Package	RD 020 023	X										X
Carrying and Borrowing Parent Teaching Package	RD 020 024	X										X
Math Combinations - Multiplication Parent Teaching Package	RD 020 025	X										X
Math Combinations - Division Parent Teaching Package	RD 020 026	X										X
Time Telling Parent Teaching Package	RD 020 027	X										X
Elementary Arithmetic Diagnostic Testing Package	RD 020 028	X								X	X	
SWRL Learning Mastery System (LMS) for Addison Wesley Mathematics	RD 020 029	X										
SWRL Learning Mastery System: Houghton Mifflin Mathematics	RD 020 030	X										

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Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous*
Basic Skills: Mathematics and Science—Continued												
SWRL Proficiency Verification System: Math	RD 020 031	X	X				X					X
Curriculum Development in Elementary Mathematics: Nine Programs	**RD 020 032**	X										
Going Metric: An Analysis of Experiences in Five Nations and Their Implications for U.S. Educational Planning	RD 020 033	X										
Metric In-Service Teacher Training: Learning From the English and Australian Experience	**RD 020 034**	X										
Minicourse 5: Individualizing Instruction in Mathematics	RD 020 035	X		X					X			
Elementary Science Information Unit	**RD 020 036**	X	X				X					
Individualized Science (IS)	RD 020 037	X	X				X					X
Inquiry Role Approach (Adapted for Use With Silver-Burdett's High School Program "Biology")	**RD 020 038**	X										
"Men and Ideas" Filmstrips Series	RD 020 039	X	X				X					
Basic Skills: Reasoning and Language Arts												
SWRL/Ginn Spelling Program	RD 030 001	X	X	X			X					X
SWRL/Ginn Composition Program	**RD 030 002**	X	X	X			X					X
SWRL/Ginn Expressive Language Program	RD 030 003	X	X	X			X					X
SWRL/Ginn Beginning Reading Program (BRP)	**RD 030 004**	X	X	X			X					
SWRL/Ginn Reading Program	RD 030 005	X	X	X			X					X
SWRL/Ginn Advanced Reading Program	**RD 030 006**	X										X
Teaching Strategies in Communication	RD 030 007	X										
Pre-Reading Skills Program (PRS)	**RD 030 008**	X						X				X
Wisconsin Design for Reading Skill Development (WDRSD): Word Attack	RD 030 009	X										X
Wisconsin Design for Reading Skill Development (WDRSD): Study Skills	**RD 030 010**	X										X
Wisconsin Design for Reading Skill Development (WDRSD): Self-Directed, Interpretive, and Creative Reading	RD 030 011	X										X
The Spelling Proof Program (SPRUF)	**RD 030 012**	X								X		
The Drill and Practice Spelling Program (DPSPEL) (Part of the Computer Assisted Elementary Spelling Program)	RD 030 013	X								X		
The Try Spellings Program (TRYSPL) (Part of the Computer Assisted Elementary Spelling Program)	**RD 030 014**	X								X		X
The Spelling Patterns Program (SPLAT) (Part of the Computer Assisted Elementary Spelling Program)	RD 030 015	X								X		
SWRL Language Analysis Package	**RD 030 016**	X								X	X	
Color Keys to Reading (Formerly called Stepping Stones to Reading)	RD 030 017	X										
Systematic Progress in Reading and Literature (SPIRAL)	**RD 030 018**	X										X
Individually Prescribed Instruction in Reading (IPI Reading)	RD 030 019	X					X					X
Individualized Spelling and Writing Patterns (ISWP)	**RD 030 020**	X					X					
The New Primary Grades Reading System	RD 030 021	X					X					X
The Spelling Program	**RD 030 022**	X										
Individualized Learning for Adults—Communications Skills	RD 030 023	X					X					X
Blending Sounds Parent Teaching Package	**RD 030 024**	X										X
Sound Symbol Parent Teaching Package	RD 030 025	X					X					X
Vocabulary Building Parent Teaching Package	**RD 030 026**	X										X

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Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous*
Basic Skills: Reasoning and Language Arts—Continued												
Word Recognition Parent Teaching Package	RD 030 027	X										
SWRL Proficiency Verification System: Reading	**RD 030 028**	X	X				X					X
System for Objective Based Assessment—Reading (SOBAR)	RD 030 029	X										X
Coordinated Helps in Language Development (CHILD)	**RD 030 030**	X						X				X
Diagnostic and Prescriptive Reading Instruction Program (DPRI)	RD 030 031	X					X					
Minicourse 2: Developing Children's Oral Language	**RD 030 032**	X		X					X			
Minicourse 18: Teaching Reading as Decoding	RD 030 033	X		X					X			X
Minicourse 22: Teaching Reading Comprehension	**RD 030 034**	X		X					X			
Aids to Curriculum Planning: English Language Arts K-12	RD 030 035	X										
Alternatives in English: A Critical Appraisal of Elective Programs. ERIC/RCS Information Analysis Series: Group 1	**RD 030 036**	X										
Communication Skills Oriented Curriculum Guide	RD 030 037											X
Language Learning, Language Development: A Bibliography	**RD 030 038**	X										X
Miscue Analysis: Applications to Reading Instruction	RD 030 039	X										X
Recommended English Language Arts Curriculum Guides K-12 and Criteria for Planning and Evaluation, 1974	**RD 030 040**	X										
Teacher Effectiveness in Elementary Language Arts: A Progress Report	RD 030 041	X										
Basic Skills: Reasoning and Problem Solving												
Achievement Competence Training (ACT)	RD 040 001	X	X				X					X
Investigating Your Environment	**RD 040 002**	X										X
Language and Thinking Program (LAT), Level 1	RD 040 003	X										X
Language and Thinking Program (LAT), Level 1, Teacher Orientation Package	**RD 040 004**	X	X				X					
Language and Thinking Program (LAT), Level 1, Mastery Learning Criterion Tests	RD 040 005	X										X
Language and Thinking Program (LAT), Level 2	**RD 040 006**					X	X					X
Language and Thinking Program (LAT), Level 2, Teacher Orientation Package	RD 040 007	X	X				X					X
Making Judgements	**RD 040 008**	X										X
The Perceptual Skills Curriculum	RD 040 009	X										
SWRL/Ginn Instructional Concepts Program (ICP)	**RD 040 010**	X	X				X					X
Logo Teaching Manual	RD 040 011	X										
Series Computer Assisted Instruction Program (SERIES)	**RD 040 012**									X	X	
Development of Higher Level Thinking Abilities (HLTA)	RD 040 013	X		X								X
Facilitating Inquiry in the Classroom	**RD 040 014**	X					X					X
Instructional Staff Development	RD 040 015	X				X	X			X		
Minicourse 9: Higher Cognitive Questioning	**RD 040 016**	X		X					X			
Teaching Children How To Think: Synthesis, Interpretation and Evaluation of Research and Development on Creative Problem Solving	RD 040 017	X	X									X
Thinking and Reasoning Teacher Development	**RD 040 018**	X	X			X			X			X
Early Childhood Education												
Classification and Communication Skills Curriculum (Part of the Early Learning Program)	RD 050 001	X										X
Quantification Skills Curriculum (Part of the Early Learning Program)	**RD 050 002**	X	*									X

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Early Childhood Education—Continued												
The Exploratory Learning Program (Part of the Early Learning Program)	RD 050 003	X										
Concepts and Language Program	RD 050 004	X	X				X					
Getting Started (Part of the Concepts and Language Component)	RD 050 005	X										
Classroom Management, K-1 (Part of the Concepts and Language Component)	RD 050 006	X										
DARCEE Preschool Program	RD 050 007	X										X
Improving Motor-Perceptual Skills (IMPS)	RD 050 008	X										
Learning Activities for Use by Classroom Teachers, Collated to 58 Developmental Competencies for Preschool Children (Ages 3-5 Years)	RD 050 009	X										X
Learning Activities for Use by Home Visitors and Parents, Collated to 58 Competencies for Preschool Children (Ages 3-5 Years)	RD 050 010	X										X
The Self-Schedule System	RD 050 011	X										
Infant Rating Scales for Use by Caregivers in Daycare Centers	RD 050 012	X										X
KRISP—Kansas Reflection Impulsivity Scale for Preschoolers	RD 050 013	X										X
Test for the Assessment of Basic Skills (TABS) Form A, Form B	RD 050 914	X										
A Competency Base for Curriculum Development in Preschool Education	RD 050 015	X										
A Good Beginning for Babies: Guidelines for Group Care	RD 050 016	X										
Introduction to Early Childhood Education (Part of the Flexible Learning System)	RD 050 017	X	X				X					X
Understanding and Assessing the Intellectual Development of Young Children (Part of the Flexible Learning System)	RD 050 018	X							X			
Developing Children's Classification Skills (Part of the Flexible Learning System)	RD 050 019	X										
Enriching Literature Experiences for Young Children (Part of the Flexible Learning System)	RD 050 020	X										
Developing Children's Sense Perception (Part of the Flexible Learning System)	RD 050 021	X										
Helping Children Develop Healthy Self-Concepts (Part of the Flexible Learning System)	RD 050 022	X										
Observing and Extending Children's Play Activities (Part of the Flexible Learning System)	RD 050 023	X		X								
Problem-Solving With Young Children (Part of the Flexible Learning System)	RD 050 024	X										
Teaching Children to Integrate Language Experience (Part of the Flexible Learning System)	RD 050 025	X										
Using Toys and Games With Children (Part of the Flexible Learning System)	RD 050 026	X										X
Arranging the Classroom for Children (Part of the Flexible Learning System)	RD 050 027	X										
Managing the Preschool Classroom (Part of the Flexible Learning System)	RD 050 028	X										
Communicating With Parents (Part of the Flexible Learning System)	RD 050 029	X										
Manual for Operating an Infant Care Center	RD 050 030	X										
Multimedia Training Package for Paraprofessional Teachers "Setting the Scene for Good Classroom Behavior"	RD 050 031	X										
Procedures for the Daily Opening and Closing of a Day Care Center	RD 050 032	X										X
School Before Six: A Diagnostic Approach	RD 050 033	X										
Teacher Expectations Early Elementary Program	RD 050 034	X										
Home-Oriented Preschool Education (HOPE)	RD 050 035											X
Home Visitor Training Package (HVTP)	RD 050 036	X	X	X			X		X			
Home Visiting With Mothers and Infants	RD 050 037	X										
Materials for Infant Development	RD 050 038	X										
Multimedia Training Package For Parents "Living and Learning in the Home"	RD 050 039	X	X	X		X	X		X			X

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Early Childhood Education—Continued												
Parent/Child Toy-Lending Library	RD 050 040	X	X	X			X					X
Teaching Your Child, a Televised Parent Training Program	**RD 050 041**								X			
TV Spot on Reading to Your Child	RD 050 042	X							X			X
Children's Friendships in School Settings	**RD 050 043**	X										X
Cognitive Development in Young Children: A Report to Teachers	RD 050 044	X										
A Collection of Papers for Teachers	**RD 050 045**	X										X
A Comparison of Provisions in State and Federal Standards for Institutional Day Care	RD 050 046	X										X
A Crosscultural Analysis of the Child Care System	**RD 050 047**	X										X
Day Care: An Abstract Bibliography (Supplement No. 1)	RD 050 048	X										X
Discipline and Behavior: An Abstract Bibliography	**RD 050 049**	X										X
Early Childhood Education Program and Research Support Literature: A State of the Art Review	RD 050 050	X										
Early Childhood Information Unit	**RD 050 051**	X										
Early Childhood Newsletters: A Selected Guide	RD 050 052	X										X
Early Childhood Research: Second Thoughts and Next Steps	**RD 050 053**	X										X
Education for Parents of Preschoolers: An Abstract Bibliography	RD 050 054	X										X
Issues and Procedures in Testing Young Children: ERIC/TM Report 37	**RD 050 055**	X										X
Discussion Guide for Parent Groups: Based on 58 Child Developmental Competencies for Use With Home-Oriented Preschool Programs	RD 050 056											X
Head Start and Follow Through, 1972-1974: An ERIC Abstract Bibliography	**RD 050 057**	X										X
Infant Education and Stimulation (Birth to 3 Years): A Bibliography	RD 050 058	X										X
Current Research and Perspectives in Open Education	**RD 050 059**	X										
Movement Education for Preschool Programs (National Program on Early Childhood Education)	RD 050 060	X										
New Directions for Early Child Development Programs: Some Findings from Research	**RD 050 061**	X										X
Nine Model Programs for Young Children	RD 050 062	X										
Notes on the Distinction Between Education and Excitement	**RD 050 063**	X										X
Parenting Materials Information Center (PMIC)	RD 050 064	X										
Psychological Perspectives and Early Childhood Education: Some Relations Between Theory and Practice	**RD 050 065**	X										X
Responsive Care Classroom: Source Books and a Handbok for Administrators	RD 050 066	X										
Review and Index to Tests and Measurements for Early Childhood Education	**RD 050 067**	X										
Self-Concept: An Abstract Bibliography	RD 050 068	X										X
Working With Parents in the Primary School	**RD 050 069**	X										X
Education and Work (Career Education): Administration and Staff Development												
The Administration of Career Education	RD 060 001	X										
Attitudes Toward Career Education	**RD 060 002**	X										
General Orientation to Career Education—An Individual Approach	RD 060 003	X										
The Community and School Based Career Education	**RD 060 004**	X										
Developing Local Career Information Systems for Middle and Secondary Schools	RD 060 005	X										
An Orientation to Career Education—Group Approach	**RD 060 006**	X										
Staff Awareness: Racial, Socioeconomic, Sex Stereotypes, Limited Career Potential	RD 060 007	X										

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Education and Work (Career Education): Administration and Staff Development—Continued

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous*
Staff Development in Career Education for the Elementary School	RD 060 008	X										
Staff Development Guidelines for Career Education	RD 060 009	X										
Staff Development Program for the Implementation of Career Education	RD 060 010	X										
Staff Development Program for Promoting Effective Use of Community Resources in Career Education	RD 060 011	X										
A Training Program for the In-Service Coordinator in Career Education	RD 060 012	X										
Teacher Aides in Career Education	RD 060 013	X										
Management Information System for Vocational Education (MISVE)	RD 060 014									X	X	
Module Development Handbook (A Product of the Performance-Based Professional Education Curricula Program)	RD 060 015	X										
Orientation to Modularized Instruction Booklet (A Product of the Performance-Based Professional Education Curricula Program)	RD 060 016	X										
Professional Vocational Teacher Education Modules (118) (Products of the Performance-Based Professional Education Curricula Program)	RD 060 017	X										
Career Education in the Elementary System	RD 060 018	X					X					
Curriculum Content Derivation System: A Users' Manual of Procedures and Guidelines	RD 060 019	X								X	X	
An Annotated Bibliography for the Implementation of Occupational Clusters	RD 060 020	X										
Career Education—A Humanistic View (Part 3 of the ERIC Clearinghouse on Teacher Education Project on Career Education)	RD 060 021	X										
Career Education Product Installation Handbook	RD 060 022	X										
Career Initiation When Alienation From Secondary School Occurs: A Review of the Literature	RD 060 023	X										
The Continuing Education Unit	RD 060 024	X										X
Directory of Vocational Information Resources in the United States	RD 060 025	X										
EPIE Career Education S•E•T• (•••Selection and Evaluation Tools)	RD 060 026	X										
Implementation of Occupational Cluster Concepts	RD 060 027	X										
The Roles of the Teacher, the Counselor, the Community, and Media in Career Guidance and Career Education: A Conceptual Model	RD 060 028	X										
Strengthening the Relationship of Education and Work	RD 060 029	X										

Education and Work (Career Education): Career Awareness and Exploration

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous*
Careers in Technology	RD 070 001	X										
Exploring the World of Work	RD 070 002	X										
Career Education Concept Lesson Cards	RD 070 003											X
Basic Measurement and Related Careers: A	RD 070 004	X										
Basic Measurement and Related Careers: B	RD 070 005	X										
Basic Measurement and Related Careers: C	RD 070 006	X										
Basic Measurement and Related Careers: D	RD 070 007	X										
Careers in Visual Art	RD 070 008	X										
Career Exploration in Earth Sciences	RD 070 009	X										
Career Exploration in the Life Sciences	RD 070 010	X										
Career Exploration in the Physical Sciences	RD 070 011	X										
Elements of Computer Careers	RD 070 012	X								X	X	
Economic and Career Awareness: A	RD 070 013	X										

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Education and Work (Career Education): Career Awareness and Exploration—Continued

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
Economic and Career Awareness: B	RD 070 014	X										
Economic and Career Awareness: C	RD 070 015	X										
Community Service Workers	RD 070 016	X										
Career Exploration Through Mathematics	RD 070 017	X										
Mathematics and Related Careers: B	RD 070 018	X										
Creating Greeting Cards: A Business Brings Pleasure	RD 070 019	X										
Learning About Businesses	RD 070 020	X										
Making Toys Through Teamwork	RD 070 021	X										
The Supermarket	RD 070 022	X										
The Service Station	RD 070 023	X										
People Who Work With Animals	RD 070 024	X										
Physical Education for Tomorrow	RD 070 025	X										
Working With Trees	RD 070 026	X										
Individualized Approach to Instruction in Foundation Education	RD 070 027											X

Education and Work (Career Education): Career Counseling

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
The Career Development Series (Product of the Home/Community-Based Career Education Model III)	RD 080 001	X										
Developing Career-Related Materials For Use With and By Adults (Product of the Home/Community-Based Career Education Model III)	RD 080 002	X										
Attracting Clients to Service-Oriented Programs (Product of the Home/Community-Based Career Education Model III)	RD 080 003	X										
Designing and Operating a Career Counseling Service for Adults (Product of the Home/Community-Based Career Education Model III)	RD 080 004	X										
Establishing and Operating a Career Resource Center for Adults (Product of the Home/Community-Based Career Education Model III)	RD 080 005	X										
External Degree Study: A New Route to Careers (Product of the Home/Community-Based Career Education Model III)	RD 080 006	X										
From Liberal Arts and Sciences to Careers: A Guide (Product of the Home/Community-Based Career Education Model III)	RD 080 007	X										
Integrating Research and Evaluation into the Operation of Service-Oriented Programs (Product of the Home/Community-Based Career Education Model III)	RD 080 008	X										
Bibliographies of Career-Related Materials (Product of the Home/Community-Based Career Education Model III)	RD 080 009	X										
Report on Fifty Selected Centers Offering Career Counseling Services for Women (Product of the Home/Community-Based Career Education Model III)	RD 080 010	X										
Chris Begins Again	RD 080 011			X								
Talking With Chlorae and Albie/(Working Title) (Product of the Home/Community-Based Career Education Model III)	RD 080 012			X								
Career Guidance Units	RD 080 013	X	X				X					X
Career Information Systems (CIS)	RD 080 014	X	X									X
Operation Guidance (An Element of CPSS, the Career Planning Support System)	RD 080 015	X							X			X
Communication and You	RD 080 016	X										
Just Me	RD 080 017	X										
Instructional Handbook* Coping in the World of Work: Practice in Problem Solving (CPSS) (A Product of CPSS, the Career Planning Support System)	RD 080 018	X	X			X	X					X

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Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
Education and Work (Career Education): Career Counseling—Continued												
Myself and Others at Home and School	RD 080 019	X										
Self-Appraisal for Decision Making and Career Planning	**RD 080 020**	X										
Understanding Self	RD 080 021	X										
Your Personality, Your Health, Your Job	**RD 080 022**	X										
Self-Directed Career Program (SDC)	RD 080 023	X										
Career Counseling in Community Colleges	**RD 080 024**	X										
Career Guidance Resource Center	RD 080 025	X										X
The Computer and Guidance in the United States: Past, Present, and a Possible Future	**RD 080 026**	X										X
Life Career Plans: Reviewing and Renewing	RD 080 027	X										X
A Comprehensive View of Career Development	**RD 080 028**	X										
Age-Income Graphs by Sex for 336 Occupations	RD 080 029	X										
The Career Data Book (Including "Student's Booklet")	**RD 080 030**	X										X
Using the TALENT Profiles in Counseling: A Supplement to Project TALENT's Career Data Book	RD 080 031	X										
Sources of Influence on Career Decision Making and Their Impact on Career Attainment: A Handbook for Counselors and Educators (A product of CPSS, the Career Planning Support System)	**RD 080 032**	X										
Education and Work (Career Education): Work Experience-Based Programs												
Experience-Based Career Education (EBCE)	RD 090 001	X					X					X
Experience-Based Career Education (EBCE)	**RD 090 002**	X	X				X					X
Experience-Based Career Education(EBCE AEL Version)	RD 090 003	X										
Far West Laboratory Experience-Based Career Education	**RD 090 004**	X			X		X					X
Management Internships: A New Model for Youth Socialization and Learning	RD 090 005	X										
Individualized Approach to Instruction and Ancillary Maintenance Activities in Family Core Curriculum	**RD 090 006**	X										X
Individualized Approach to Instruction in the Building Trades and Services	RD 090 007	X										X
Individualized Approach to Instruction in Automotive and Small Engine Repair	**RD 090 008**	X										X
Individualized Approach to Instruction in Marketing and Tourism	RD 090 009	X										X
Individualized Approach to Instruction in Office Education	**RD 090 010**	X										X
Educational Equity: Handicapped												
SWRL Speech Articulation Kits	RD 100 001	X										X
Weekly Meal Sequence Program (A program to teach food preparation skills to the retarded)	**RD 100 002**	X										X
Lippincott's Comprehension Questions (Six Books, D through I)	RD 100 003	X										
Special Edition for Hearing Impaired Students, 1973 Stanford Achievement Tests	**RD 100 004**	X										X
Linguistics and the Language of Deaf Children	RD 100 005	X										
The Training Program for Parents and Therapists of Autistic Children (Part of the Instructional Systems Program)	**RD 100 006**	X										X
Configurations of Change: The Integration of Mildly Handicapped Children Into the Regular Classroom	RD 100 007	X										
Integrating Handicapped Children Into Regular Classrooms (With Abstract Bibliography)	**RD 100 008**	X										X

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Educational Equity: Handicapped—Continued												
Parents as Teachers: A Rationale for Involving Parents in the Education of Young Handicapped Children	RD 100 009	X										X
Understanding Young Children: Emotional and Behavioral Development and Disabilities	**RD 100 010**	X										X
Understanding Young Children: Language Development and Language Disabilities	RD 100 011	X										X
Understanding Young Children: Learning Development and Learning Disabilities	**RD 100 012**	X										X
Understanding Young Children: Intellectual Development and Intellectual Disabilities	RD 100 013	X										X
Understanding Young Children: The Handicapped Child in the Normal Preschool Class	**RD 100 014**	X										X
Educational Equity: Multicultural/Bilingual Education												
Teacher Inservice Training Program (Part of the Alaska Satellite Demonstration Program)	RD 110 001								X			
Alaska Native Magazine Program (Part of the Alaska Satellite Demonstration Program)	**RD 110 002**								X			
Health Education Program (Part of the Alaska Satellite Demonstration Program)	RD 110 003	X							X			
Basic Oral Language Development Program (BOLD) (Part of the Alaska Satellite Demonstration Project)	**RD 110 004**	X							X			
Alaskan Readers (Alaskan Reading and Language Development Program)	RD 110 005	X										X
Communication Arts Program I (CAP I)	**RD 110 006**	X										X
SWRL English Language and Concepts Program for Spanish-Speaking Children (ICS)	RD 110 007	X	X	X			X					X
Bilingual Early Childhood Program (BECP), Level I	**RD 110 008**	X	X				X	X				
Bilingual Early Childhood Program (BECP), Level I–Three Year Olds, Instructional Materials	RD 110 009	X	X					X				
Bilingual Early Childhood Program (BECP) Level I, Staff Development	**RD 110 010**	X	X				X	X				
Bilingual Early Childhood Program (BECP), Level I, Parent Involvement	RD 110 011	X										
Bilingual Early Childhood Program (BECP), Level II	**RD 110 012**	X	X				X	X				
Bilingual Early Childhood Program (BECP), Level II, Instructional Materials	RD 110 013	X	X					X				
Bilingual Early Childhood Program (BECP), Level II, Staff Development	**RD 110 014**	X	X				X	X				
Bilingual Early Childhood Program (BECP), Level II, Parent Involvement	RD 110 015	X										X
Bilingual Early Childhood Program (BECP), Level III	**RD 110 016**	X	X				X	X				X
Bilingual Early Childhood Program (BECP), Level III, Instructional Materials	RD 110 017	X	X					X				X
Bilingual Early Childhood Component, Level III, Staff Development	**RD 110 018**	X	X				X					
Parent Involvement III	RD 110 019	X										
Paso a Paso con los Ninos (Part of the Early Childhood Program)	**RD 110 020**	X						X				
Bilingual Kindergarten System	RD 110 021	X	X				X	X				
Bilingual Kindergarten - Instructional Materials	**RD 110 022**	X	X					X				
Bilingual Kindergarten Parent Involvement	RD 110 023	X										X
Bilingual Kindergarten Staff Development	**RD 110 024**	X	X				X					
Viviendo y Aprendiendo En El Hogar	RD 110 025	X	X	X		X	X		X			X
Bilingual Oral Language and Reading (BOLAR), Grade 1	**RD 110 026**	X										X
Bilingual Oral Language and Reading (BOLAR), English Oral Language, C	RD 110 027	X										X
Spanish Oral Language Grade 1 (Part of Bilingual Oral Language and Program)	**RD 110 028**	X										
Bilingual Oral Language and Reading (BOLAR), English Reading, Gra	RD 110 029	X										
Spanish Reading, Grade 1 (Part of the Bilingual Oral Language and Reading Program)	**RD 110 030**	X										

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Educational Equity: Multicultural/Bilingual Education—Continued												
Bilingual Oral Language and Reading (BOLAR), Grade 2	RD 110 031	X										X
Bilingual Oral Language and Reading (BOLAR), English Oral Language, Grade 2	**RD 110 032**	X										X
Bilingual Oral Language and Reading (BOLAR), Spanish Oral Language, Grade 2	RD 110 033	X										
Bilingual Oral Language and Reading (BOLAR), English Reading, Grade 2	**RD 110 034**	X										
Bilingual Oral Language and Reading (BOLAR), Spanish Reading, Grade 2	RD 110 035	X										
ABE Readiness Materials	**RD 110 036**	X	X				X					X
Systems Approach to Lesson Planning Package	RD 110 037	X							X			
Empleen Ingles	**RD 110 038**	X							X			
Performance Objectives Package	RD 110 039	X	X				X					
Bilingual Balance Tests	**RD 110 040**	X										X
Bidialectal Balance Tests	RD 110 041	X										X
SOBER Espanol	**RD 110 042**	X										X
Black Dialects and Reading	RD 110 043	X										
Dialects and Dialect Learning	**RD 110 044**	X					X					X
Analyzing Children's Books with a Chicano Perspective (Part of the Flexible Learning System)	RD 110 045	X										
Selecting Children's Books With a Black Perspective (Part of the Flexible Learning System)	**RD 110 046**	X										
Content Analysis of Textbooks for Black Students, Grades 1-3	RD 110 047	X	X				X					
Learning a Standard English	**RD 110 048**	X					X					X
Teaching a Standard English to Speakers of Other Dialects	RD 110 049	X	X									X
Teaching Writing to Speakers of Nonstandard Dialects	**RD 110 050**	X					X					X
English as a Second Language Package	RD 110 051	X	X	X			X					
Thinking and Reasoning Games (Part of the Thinking and Reasoning Program)	**RD 110 052**	X			X		X		X			X
The Game Center (Part of the Thinking and Reasoning Program)	RD 110 053	X		X					X			X
Preparing Teachers for Mexican American Children	**RD 110 054**	X										
Practice-Centered Teacher Training: Standard English for Speakers of Nonstandard Dialects	RD 110 055	X										
Multimedia Training Package for Spanish Speaking Paraprofessional Teachers: "El arreglo de la sala de clase para buen comportamiento"	**RD 110 056**	X	X	X		X			X			X
The Implications of Bilingual Education for Developing Multicultural Sensitivity Through Teacher Education	RD 110 057	X										
Confrontation: Human Relations Training Unit	**RD 110 058**	X		X								
Transcultural Counseling: Needs, Programs, and Techniques	RD 110 059	X										X
Educational Equity: Sex Fairness												
Affirmative Action: Women's Rights on Campus, Report No. 6	RD 120 001	X										
Girls at 12 (Part of the Role of Women in American Society Project)	**RD 120 002**	X		X								
Parent-Student Handbook on Sex Bias and Stereotyping: Implications for Career Plans (A Product of CPSS, the Career Planning Support System)	RD 120 003	X										
Protocols on the Process of Change (Sex Role Stereotyping in Schools)	**RD 120 004**	X		X								
Protocols on Sex Role Stereotyping in Schools	RD 120 005	X		X								
Sex Role Development in Young Children: An Abstract Bibliography	**RD 120 006**	X										X
Sex Role and Pupil Role in Early Childhood Education	RD 120 007	X										X

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Educational Equity: Sex Fairness—Continued												
Sounds of Change: A Report on Training in Counseling and Programming for Women's Career Opportunities	RD 120 008	X										
Women and the World of Work (Product of the Home/Community-Based Career Education Model III)	RD 120 009	X										
Evaluation, Measurement and Needs Assessment												
CSE Elementary School Evaluation Kit: Needs Assessment	RD 130 001	X										X
CSE Elementary School Formative Evaluation Kit	RD 130 002	X										X
Evaluation Workshop I: An Orientation (EW-I)	RD 130 003	X					X					X
Evaluation Workshop II: Needs Assessment (EW-II)	RD 130 004	X										X
CSE Preschool/Kindergarten Hierarchical Objectives Charts	RD 130 005	X										
CSE Elementary School Hierarchical Objectives Charts	RD 130 006	X										
CSE/RBS Test Evaluations: Tests of Higher-Order Cognitive, Affective, and Interpersonal Skills	RD 130 007											X
CSE-ECRC Preschool/Kindergarten Test Evaluations	RD 130 008	X										
CSE Elementary School Test Evaluations	RD 130 009	X										
CSE Secondary School Test Evaluations	RD 130 010	X										
CSE Elementary School Program Planning Kit	RD 130 011	X										X
Development, Dissemination and Evaluation (DD and E) Assessment Battery	RD 130 012	X										X
Evaluation for Program Improvement	RD 130 013	X	X			X	X					
Pupil-Perceived Needs Assessment Package	RD 130 014	X										
Pupil Assessment System	RD 130 015	X										
Handbook of Comprehensive Planning in Schools	RD 130 016	X										
School Planning, Evaluation and Communications System (SPECS)	RD 130 017	X	X				X					
A System for Assessing the Stages of Concern of Innovation Users (The S of C Dimension of the Concerns-Based Adoption Model (CBAM))	RD 130 018	X										
A System for Assessing the Levels of Use of Innovation Users (The L of U Dimension of the Concerns-Based Adoption Model(CBAM))	RD 130 019	X					X					
Two Instruments for Diagnosing User System Readiness for Innovative Adoption	RD 130 020	X										
An Administrator's Handbook on Curriculum Evaluation	RD 130 021	X										
Community Perceived Needs Assessment	RD 130 022	X										
Evaluating School Personnel Today	RD 130 023	X										
Model Training Program in Qualitative Educational Evaluation	RD 130 024	X										
School District Planning Guide for Change	RD 130 025	X										
A Radical and Regressive Solution to the Problem of Evaluation	RD 130 026	X										X
Academic and Social Behavior Assessment Kit	RD 130 027	X										X
Assessment of Student Attitudes Toward Learning Environments Scale (ASA)	RD 130 028	X										
Colored Blocks Test of Basic Cognitive Level	RD 130 029	X										X
A Computer Program for Assessing "True" Student Learning Gains and Their Relation to Teacher and Student Characteristics	RD 130 030	X										
Psychosocial Maturity (PSM) Inventory	RD 130 031	X										X
Purdue Self Concept Scale for Primary Grade Children	RD 130 032	X										
Purdue Social Attitude Scales for Primary Grade Children	RD 130 033	X										
Racial Attitudes Survey Instrument	RD 130 034	X										

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Evaluation, Measurement and Needs Assessment – Continued												
Classroom Observation System	RD 130 035	X										
Peer Evaluation To Improve Teaching	**RD 130 036**	X										
The Teacher Concerns Checklist (TCCL)	RD 130 037	X										
Teacher Assessment System	**RD 130 038**	X										
Teacher Affective Sensitivity Scale (TASS)	RD 130 039	X							X			
Issues and Procedures in the Development of Criterion Referenced Tests: ERIC/TM Report 26	**RD 130 040**	X										X
Opening Institutional Ledger Books—A Challenge to Educational Leadership Suggestions for Talking to School-Community Groups About Testing and Test Results: ERIC/TM Report 28	RD 130 041											X
Procedures and Issues in the Measurement of Attitudes: ERIC/TM Report 30	**RD 130 042**	X										X
A Collection of Criterion Referenced Tests: ERIC/TM Report 31	RD 130 043	X										X
Evaluation Designs for Practitioners: ERIC/TM Report 35	**RD 130 044**	X										X
Finance, Productivity, and Management												
Cost-Effectiveness Guide for Administrators	RD 140 001	X										
Cost Effectiveness Technique	**RD 140 002**	X										
Handbook of Organization Development in Schools	RD 140 003	X										
How To Inventory Organizational Needs	**RD 140 004**	X										
Planning Program Implementation: A Process Guide	RD 140 005	X										
Attendance Monitoring System (AMS)	**RD 140 006**	X								X	X	
System Approach for Education (SAFE)	RD 140 007	X										X
Individually Guided Education (IGE)	**RD 140 008**	X										
Ariole Planning Kit	RD 140 009	X										
Data Management and Decision Making (DM/DM)	**RD 140 010**									X	X	X
Relevant Educational Applications of Computer Technology (REACT) Computers in Education: A Survey Course I: Computers in Education: A Survey	RD 140 011	X										X
Relevant Educational Applications of Computer Technology for Teachers (REACT), Course II: Teachers: Computer-Oriented Curriculum	**RD 140 012**	X										X
Relevant Educational Applications of Computer Technology for Administrators (REACT), Course III: Computer Applications for Administrators	RD 140 013	X										X
Designing Instructional Programs	**RD 140 014**	X										X
Diagnostic Survey for Leadership Improvement (DSLI)	RD 140 015	X										
Ernstspiel Task Group Communications Kit	**RD 140 016**	X	X			X	X					
Interpersonal Communications (IPC)	RD 140 017	X		X			X					X
Interpersonal Influence	**RD 140 018**	X		X			X					X
Organization Development: Building Human Systems in Schools	RD 140 019		X				X					
Organization Development in Schools (An Audio Slide Presentation)	**RD 140 020**	X										
Project Management Basic Principles	RD 140 021	X										
Preparing Educational Training Consultants: Skills Training (PETC-I)	**RD 140 022**	X					X					X
Preparing Educational Training Consultants: Consulting (PETC-II)	RD 140 023	X					X					X
Preparing Educational Training Consultants: Organizational Development (PETC-III)	**RD 140 024**	X										X
Project Management Executive Orientation	RD 140 025	X					X					
Proposal Development	**RD 140 026**	X										

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Finance, Productivity, and Management—Continued

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Rural Futures Development Strategy Descriptions	RD 140 027	X				X						X
Rural Futures Development Guide for Support Agencies	**RD 140 028**	X										X
Rural Futures Development Guide for School Boards	RD 140 029	X										
Rural Futures Development Guide for Schools	**RD 140 030**	X										
Rural Futures Development Notebook for School– Community Groups	RD 140 031	X										
Rural Futures Development Guide for Training School-Community Process Facilitators	**RD 140 032**	X										
Rural Futures Development Manual for School– Community Process Facilitators	RD 140 033	X										
Research Utilizing Problem Solving (RUPS)	**RD 140 034**	X					X					
Social Conflict and Negotiative Problem Solving (NPS)	RD 140 035	X										X
SWRL Instructional Development Control and Monitoring System (IDCMS)	**RD 140 036**	X								X	X	
SWRL Instructional Management System (IMS-3)	RD 140 037	X										X
SWRL Instructional Product Selection Kit	**RD 140 038**	X	X				X					
A Training Package for Determining Instructional Purposes	RD 140 039	X										
Community Schools	**RD 140 040**	X										
Designing School Organizations: Theory, Research Results, and Approaches	RD 140 041	X										X
Developing Open Education in America	**RD 140 042**	X										
Directory of Organizations and Personnel in Educational Management	RD 140 043	X										X
Free/Open Schools	**RD 140 044**	X										
Guide to the Development of a Regional Consortium of State Departments of Education	RD 140 045	X										
A Guide to Organizing Short Term Study Abroad Programs	**RD 140 046**	X										X
The Impact of Legal Decisions on the Future of Education	RD 140 047	X										
Parental and Community Involvement in Education and Teacher Education	**RD 140 048**	X										
Student's Rights: A Guide to the Rights of Children, Youth, and Future Teachers	RD 140 049	X										
Playground Facilities and Equipment	**RD 140 050**	X										
Sourcebook of Training Products in Instructional Planning and Management	RD 140 051	X										
Student Press Rights: Struggles in Scholastic Journalism	**RD 140 052**	X										
Year-Round Schools	RD 140 053	X										X

Guidance and Counseling

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An Experimentalist Approach to Counseling	RD 150 001	X										X
Behavior Modification Handbook for Helping Professionals	**RD 150 002**	X										X
Counseling Older Persons: Careers, Retirement, Dying	RD 150 003	X										X
Developing Students' Potentials	**RD 150 004**	X										X
An Accountability Model for Counselors: ERIC/TM Report 27	RD 150 005											X
New Designs and Methods for Delivering Human Developmental Service	**RD 150 006**	X										X
Paraprofessionals in Human Services	RD 150 007	X										X
Parent Education and Elementary Counseling	**RD 150 008**	X										X
What's Happening in Counseling in U.S. Federal Prisons	RD 150 009	X										X
Impact Magazine	**RD 150 010**	X										X
Searchlight	RD 150 011	X										X

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Information Utilization and Dissemination												
Analyzing and Improving the Implementation of a Local Education Program (Component of a 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	RD 160 001	X										
Diffusing Educational Improvement Programs Within a School District (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	**RD 160 002**	X										
Diffusion Strategy Guide	RD 160 003											X
The Educational Information Consultant (EIC) Training Program	**RD 160 004**	X										X
Enquiry as an Educational Theme (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	RD 160 005	X										
Individualization, Mastery, and Student Self- Direction as Themes of Educational Reform, With Related Innovations (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs	**RD 160 006**	X										
Instructor's Guide to Training for Leadership in Local Educational Improvement Programs (A 10-Unit Training Program)	RD 160 007	X										
Personal/Social Development as an Educational Theme, With Related Innovations (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	**RD 160 008**	X										
Promoting Change in Schools, a Diffusion Casebook	RD 160 009	X										
Relevance as an Educational Theme, With Related Innovations (Component of a 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	**RD 160 010**	X										
Selecting an Educational Improvement Program (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	RD 160 011	X										X
Task Flow for Designing and Conducting Local Educational Improvement Programs (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	**RD 160 012**	X										
Theory and Strategies of Local Educational Improvement (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	RD 160 013	X										
Training Program Introduction and General Study Plan Guide (Component of 10-Unit Program of Training for Leadership in Local Educational Improvement Programs)	**RD 160 014**	X										
ALERT, a Sourcebook of Elementary Curricula, Programs, and Projects	RD 160 015	X										
Behavior of Innovative Personnel	**RD 160 016**	X										X
Community Use of the ERIC System: Information Packages	RD 160 017											X
Change Strategies and Techniques for the Helper	**RD 160 018**	X										X
ERIC: What It Is, How To Use It	RD 160 019											X
The Evaluation of Educational Information Centers: ERIC/TM Report 34	**RD 160 020**											X
1974 Directory of Resources in Adult Education	RD 160 021											X
Options and Perspectives: A Sourcebook of Innovative Foreign Language Programs in Action, K-12	**RD 160 022**											X
How To Conduct a Search Through ERIC	RD 160 023	X										
Library and Reference Skills Curriculum	**RD 160 024**	X										X
Postsecondary Education												
State Postsecondary Education Planning Model (SPEPM)	RD 170 001	X										
An Examination of Possible Statewide Applications and Extensions of the NCHEMS Program Classification Structure	**RD 170 002**	X										
Information Exchange Procedures (IEP)	RD 170 003	X										
A Reference Guide to Postsecondary Education Data Sources	**RD 170 004**	X										

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Postsecondary Education—Continued

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Postsecondary Education Institutional Data Use Procedures Manual	RD 170 005	X										
Statewide Measures Inventory	**RD 170 006**	X										
Postsecondary Education Outcomes Measures and Procedures Manual	RD 170 007	X										
Program Measures	**RD 170 008**	X										
Revision of the Program Classification Structure	RD 170 009	X										
Resource Requirements Prediction Model (RRPM) 1.6	**RD 170 010**	X										
Costing and Data Management System	RD 170 011	X										
Data Element Dictionary (DED)	**RD 170 012**	X										
NCHEMS Glossary	RD 170 013	X										
Postsecondary Education Academic Unit Planning Manual (AUPM)	**RD 170 014**	X										
Faculty Activity Analysis Manuals (FAA)	RD 170 015	X										
Student Flow Model SFM-IA	**RD 170 016**	X										
Accountability in Higher Education, Report No. 1	RD 170 017	X										
Community Colleges Respond to Elders: A Sourcebook for Program Development	**RD 170 018**	X										
Competency-Based Educational Programs in Higher Education	RD 170 019	X										
Computerized Data Sources for Higher Education	**RD 170 020**	X										
A Conceptual Review of Experiential Learning in Higher Education	RD 170 021	X										
Concerns of Historically and Developing Black Institutions: A Bibliography	**RD 170 022**	X										
Faculty Workload: Facts, Myths, and Commentary	RD 170 023	X										
Higher Education and the Steady State	**RD 170 024**	X										
Information Centers in Higher Education	RD 170 025	X										
Lifetime Learning: Extending Availability of Education Beyond College Age	**RD 170 026**	X										
The Personalized System of Instruction: An Educational Alternative	RD 170 027	X										
State Aid to Private Higher Education, Report No. 3	**RD 170 028**	X										
Strategies for Improving College Teaching, Report No. 8	RD 170 029	X										
Time Shortened Degrees	**RD 170 030**	X										
Urban Internships in Higher Education, Report No. 9	RD 170 031	X										

Social Education

Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
Environmental Education Concept Lesson Cards	RD 180 001											X
Discussing Controversial Issues	**RD 180 002**	X		X					X			
Language of Personal Experience (LOPE)	RD 180 003	X					X					
Pass It On, I	**RD 180 004**	X	X	X			X					
Pass It On, II (Part of the Children's Folklore Program)	RD 180 005	X		X			X					
From Child to Child (Part of the Children's Folklore Program)	**RD 189 006**			X					X			
Responsive Education Program	RD 180 007	X										X
Social Encounter and Reserach Curriculum for Humanization (SEARCH)	**RD 180 008**	X										X
Social Education, Year 1	RD 180 009	X	X				X	X				X
Social Education, Year 2	**RD 180 010**	X	X	X			X	X				X
Social Education, Year 3	RD 180 011	X	X	X		X	X	X				X

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Subject/Product Title/Identification Number		Book	Film/Filmstrip	Motion Picture	Slides	Transparencies	Cassette	Record	Video Tape	Computer	Computer Terminal	Miscellaneous *
Social Education—Continued												
Relevant Explorations in Active Learning (REAL) Sets I and III	RD 180 012	X					X					X
People and Problems	**RD 180 013**			X								X
Social Development and Behavior: An Abstract Bibliography	RD 180 014	X										X
A Critical Analysis of Values Education Resources	**RD 180 015**	X										
Educating Prisoners for Socially Constructive Roles	RD 180 016	X										
Preparing School Personnel Relative to Values: A Look at Moral Education in the Schools	**RD 180 017**	X										
Preparing Teachers, Students and Citizens to Deal Constructively With the Problems and Potentialities of Aging	RD 180 018	X										
Social Development in Young Children: A Report for Teachers	**RD 180 019**	X										
Social Organization of the High School	RD 180 020	X										
Values Education: Approaches and Materials	**RD 180 021**	X										
Social Science												
Social Psychology: A Resource for Elementary and Secondary Educators	RD 190 001	X										
American Government Information Unit (AGIU)/(Curriculum Alternatives for Secondary Schools)	**RD 190 002**	X										
Learning With Games: An Analysis of Social Studies Educational Games and Simulations	RD 190 003	X										
Bringing About Change in Social Studies Education	**RD 190 004**	X										
Coping With Community Controversy: Guidelines for Introducing New Social Studies Programs	RD 190 005	X										
18, 19, 20: Will They Vote?	**RD 190 006**	X										
Geography in Elementary and Secondary Education: Tradition to Opportunity	RD 190 007	X										
Global Dimensions in the New Social Studies	**RD 190 008**	X										
Guidelines for Using a Social Simulation/Games	RD 190 009	X										
Preparing To Teach Political Science: Sources and Approaches	**RD 190 010**	X										
Profiles of Promise (POPs)	RD 190 011	X										
Teaching American History: Sources and Approaches	**RD 190 012**	X										
Teaching Psychology in Secondary Schools	RD 190 013	X										
Tips for Teaching About the Bicentennial in the Social Studies	**RD 190 014**	X										
Tips for Teaching About Ethnic Heritage in Pre-College Social Studies	RD 190 015	X										
Tips for Teaching Pre-College Sociology	**RD 190 016**	X										
Trends and Resources in Pre-College Teaching of Anthropology	RD 190 017	X										
Teacher Education												
Classroom and Instructional Management Program (CLAIM)	RD 200 001	X	X				X					
Cooperative Urban Teacher Education Program (CUTE)	**RD 200 002**	X										X
Cross-Age Peer Help	RD 200 003	X	X			X		X				
Interactional Analysis	**RD 200 004**	X	X				X					X
Interaction Analysis, a Minicourse	RD 200 005	X					X					X
Interdisciplinary Faculty Teaming: A Workshop	**RD 200 006**	X										
Minicourse 1: Effective Questioning—Elementary Level	RD 200 007	X		X					X			
Minicourse 8: Organizing Independent Learning—Primary Level	**RD 200 008**	X		X					X			

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Minicourse 10: Role Playing in the Classroom	RD 200 009	X		X					X			
Minicourse 15: Organizing Independent Learning—Intermediate Level	**RD 200 010**	X		X					X			
Minicourse 23: Classroom Management Through Positive Reinforcement	RD 200 011	X		X					X			
Modules and Their Role in Personalized Programs: A Workshop (MTRIPP)	**RD 200 012**	X	X			X	X					
Selecting Computer Instructional Materials	RD 200 013	X								X	X	X
Setting Up the Classroom (Part of the Concepts and Language Component)	**RD 200 014**	X										
Systematic and Objective Analysis of Instruction (SOAI)	RD 200 015	X										X
Teams-Games-Tournament (TGT) Instructional Process Curriculum Units	**RD 200 016**	X										X
Training Materials for the Personal Assessment Feedback System (Part of the Comprehensive Assessment System (COMPASS) developed for the Personalized Teacher Education Program (PTEP))	RD 200 017	X										
Training Materials for the Personalized Videotape Feedback System	**RD 200 018**	X										
Assessing and Influencing Behavior: A Self-Instructional Teacher Training Program	RD 200 019	X										
Design and Development of Curricular Materials	**RD 200 020**	X										
Individually Guided Motivation (IGM) (Part of the Individually Guided Motivation System)	RD 200 021	X		X								
Preparing and Using Self-Teaching Units for Foreign Languages	**RD 200 022**	X										X
The Use of Learning Principles in Instruction	RD 200 023	X										
Accreditation Problems and the Promise of PBTE	**RD 200 024**	X										
Alternatives for Schools of Education Confronted with Education Enrollment and Revenue Reductions	RD 200 025	X										
Beginning Teachers in the Inner City: A Study of the Literature on Their Problems and Some Possible Solutions	**RD 200 026**	X										
The Campus Laboratory School: Phoenix or Dodo Bird	RD 200 027	X										
Classroom Observation Systems in Preparing School Personnel	**RD 200 028**	X										
Compensatory Education: Implications for Teacher Education	RD 200 029	X										
Competency-Based Education: The State of the Scene	**RD 200 030**	X										
Comprehensive Proposals for Teacher Education: A Concise Guide Derived From Donald R. Cruickshank's Study of Proposals for Second-Phase Comprehensive Elementary Teacher Education Models Project	RD 200 031	X										
Concepts of Teacher Centers	**RD 200 032**	X										
Effective Observation of Educators	RD 200 033	X										X
Exploring Teachers' Centers	**RD 200 034**	X										
Field-Based Teacher Education and K-12 Personnel Responsibilities in Teacher Education: A Review	RD 200 035	X										X
Flexibility in Program Planning and NCATE Standards	**RD 200 036**	X										
A Guide to a Competency-Based Field-Centered Systems Approach to Elementary Teacher Education	RD 200 037	X										
A Guide to Behavioral Science Elementary Teacher Education Program	**RD 200 038**	X										
A Guide to Educational Specifications for a Comprehensive Elementary Teacher Education Program	RD 200 039	X										
A Guide to Georgia Educational Model Specifications for the Preparation of Elementary Teachers	**RD 200 040**	X										
A Guide to Model Elementary Teacher Education Program	RD 200 041	X										
A Guide to a Model for the Preparation of Elementary School Teachers	**RD 200 042**	X										
A Guide to a Model of Teacher Training for the Individualization of Instruction	RD 200 043	X										

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A Guide to the Teacher-Innovator: A Program To Prepare Teachers	**RD 200 045**	**X**										
Guidelines for the Selection of Students Into Programs of Teacher Education	RD 200 046	X										
The Governance of Teacher Education	**RD 200 047**	**X**										
In-Service Teacher Education Sources in the ERIC System	RD 200 048	X										
In-Service Training for the Beginning Teacher	**RD 200 049**	**X**										
In-Service Education for Teachers of Disadvantaged Adults	RD 200 050	X										
Microteaching: History and Present Status	**RD 200 051**	**X**										
Microteaching Selected Papers	RD 200 052	X										
Parsing the Paradox: Assuring Quality in School Personnel Preparation	**RD 200 053**	**X**										
Performance-Based Certification of School Personnel	RD 200 054	X										
Professional Laboratory Experiences at the Preservice Level	**RD 200 055**	**X**										
Programmatic Development of In-Service Teacher Education	RD 200 056	X										
Promising Practices in the Training and Renewal of Teacher Educators	**RD 200 057**	**X**										**X**
Protocol Materials Training Materials for Uniting Theory and Practice	RD 200 058	X										
A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers	**RD 200 059**	**X**										
School-College Relations in Preparing School Personnel	RD 200 060	X										
Simulation as an Instructional Alternative in Teacher Education	**RD 200 061**	**X**										
Simulation in Preparing School Personnel	RD 200 062	X										
Structured Career Development From Teacher Aide and Beyond	**RD 200 063**	**X**										**X**
A Synthesis of Research and Innovation in Programs for the Further Development of Teachers of Adults	RD 200 064	X										
Teaching Centers: Toward the State of the Scene	**RD 200 065**	**X**										
Toward a Humane Curriculum	RD 200 066	X										
Unique Challenges of Preparing Teachers for Inner-City School: Progress and Prospects	**RD 200 067**	**X**										
Utilization of Information Resources in Planning Teacher Professional Preparation Programs	RD 200 068	X										

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	14	INTRODUCTION TO MOTION (PART OF THE AESTHETIC EDUCATION PROGRAM) *A learning package for young children focusing on functional and aesthetic aspects of motion*
	16	INTRODUCTION TO SOUND (PART OF THE AESTHETIC EDUCATION PROGRAM) *Materials for students in kindergarten and the primary grades to help them become aware of sounds in their everyday environment*
	19	INTRODUCTION TO SPACE (PART OF THE AESTHETIC EDUCATION PROGRAM) *An introduction for young children to what space is and how it is used in the environment*
	22	DRAMATIC CONFLICT (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package to enable students in grades 1-3 to explore major elements of structuring a plot*
	25	MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM) *Materials to introduce 3d-grades students to movement and its expressive elements*
	28	NONVERBAL COMMUNICATION (PART OF THE AESTHETIC EDUCATION PROGRAM) *A set of materials which introduces primary students to nonverbal communication in their environment and in the theater*
	32	PART AND WHOLE (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package designed to introduce students in grades K-2 to part and whole as a pervasive relationship in their lives*
	35	RHYTHM/METER (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package which helps students in grades 2-4 to become familiar with rhythm and meter in music*
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	50	TEXTURE (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package to help young children better understand the qualities of texture in their environment and in the arts*
	54	TONE COLOR (PART OF THE AESTHETIC EDUCATION PROGRAM) *A group of materials which helps students from preschool to 5th grade sharpen their perception of one quality of sound–tone color*
	57	THE ACTOR (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package designed to acquaint students in grades 4-8 with actors*
	60	THE ARCHITECT (PART OF THE AESTHETIC EDUCATION PROGRAM) *A set of materials which introduces 4th- and 5th-grade students to architects and the realm of architecture*
	62	THE CHOREOGRAPHER (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package which introduces 5th-grade students to the artists who create dances*
	65	THE COMPOSER (PART OF THE AESTHETIC EDUCATION PROGRAM) *A package which introduces 4th- and 5th-grade students to composers as the originators of music*

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A set of instructional materials for grades 6-8 which explores the world of the artist's receiver, the audience

70 **THE FILMMAKER (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A set of instructional materials suitable for grades 4-8 which explores the world of the filmmaker

73 **THE VISUAL ARTIST (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package suitable for grades 4-8 which introduces the visual artist as a real person

76 **WRITERS: POETS, STORYTELLERS, AND PLAYWRIGHTS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A set of instructional materials which introduces 5th- and 6th-grade students to three different kinds of writers

79 **ANALYZING CHARACTERIZATION (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package designed to help students in grades K-4 verbalize more descriptively their perceptions regarding people

82 **ARRANGING SOUNDS WITH MAGNETIC TAPES (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package which involves 3d graders and older students in the creative process

85 **CONSTRUCTING DRAMATIC PLOT (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A series of games in which 3d-grade students begin to see how a playwright achieves unity in a play

88 **CREATING CHARACTERIZATION (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package used primarily with 3d graders which deals with the physical and vocal expression of emotion in the theater

91 **CREATING WITH SOUNDS AND IMAGES (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package which helps students in grades 3-4 to become aware of various means of communication

94 **CREATING WORD PICTURES (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package which encourages students in grades 2-4 to explore the English language as a tool for effective communication

97 **EXAMINING POINT OF VIEW (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package which introduces the conceptual and physical aspects of point of view to 2d graders and older students

100 **FORMING WITH MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package giving 3d graders and older students an opportunity to become familiar with some elements of the art form of dance

103 **MAKING SOUNDS INTO PATTERNS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package designed to provide primary students with some basic skills to make them more sensitive listeners to music

106 **PERCEIVING SOUND WORD PATTERNS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package which introduces 2d-grade students to word patterns as devices used in literature

109 **RELATING SOUND AND MOVEMENT (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A package intended for 2d graders which explores the relationships that exist between sounds and body movements

112 **SWRL ELEMENTARY ART PROGRAM**
A program for grades K-6 which provides resources for sequenced, systematic art instruction

115 **SWRL MUSIC PROGRAM**
A program for grades K-6 which provides resources for conducting sequential music instruction

118 **ARTS/PARTS: PERCEIVING AND ANALYZING THE ARTS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A teacher education package which deals with the arts as examples of aesthetic education

121 **THE CREATIVE PROCESS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
Materials for elementary teachers emphasizing the expressive qualities of an object or experience

123 **HOW DOES A RAINBOW FEEL? AN INTRODUCTION TO AESTHETIC EDUCATION**
An overview for elementary teachers of the value of aesthetic education in the school

125 **WHAT DO YOU SAY AFTER YOU SAY "I LIKE IT"?: A METHOD OF AESTHETIC PERCEPTION (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A teacher education package which is an introduction to aesthetic education concepts

129 **AESTHETIC EDUCATION LEARNING CENTERS (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A cooperative community effort to develop innovative teacher education programs in aesthetic learning

133 **AESTHETICS IN THE EVERYDAY WORLD (WORKING TITLE) AND SHAPES (TELEVISION PROGRAMS) (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A program with the goal of having the viewer accept aesthetic values as important to human life and society

135 **THE FIVE SENSE STORE (PART OF THE AESTHETIC EDUCATION PROGRAM)**
A traveling exhibit which provides students with a general introduction to the concepts of aesthetic education

138 **SWRL SONG RETRIEVAL SYSTEM**
An integrated, computer-assisted system to locate or analyze songs with desired characteristics

BASIC SKILLS: Mathematics and Science

141 **OVERVIEW**

145 **STORIES BY FREDERIQUE (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
Twenty-two stories for children (ages 5-14) designed to introduce fundamental mathematics concepts in an appealing manner

147 **FILMS OF TWELVE DEMONSTRATION CLASSES TAUGHT BY FREDERIQUE (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
A film series demonstrating a functional-relational approach to elementary school mathematics

149 **AN INTRODUCTION TO MATHEMATICS OF GRADES K TO 2 (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
A textbook for teaching elementary mathematics education at the undergraduate level of training

152 **CSMP ELEMENTARY SCHOOL PROGRAM (K-3) (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
A program providing a complete mathematics curriculum for students in grades K-3

156 **A SHORT COURSE IN PROBABILITY (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
A program-oriented approach to probability for grades 7-12

158 **ELEMENTS OF MATHEMATICS (EM) PROGRAM (PART OF THE COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM)**
A program to bring modern mathematics to highly verbal, well-motivated students in grades 7-12

161 **MATHEMATICS ACTIVITY PACKAGE I (MAP I) (MAY BE USED WITH MAPS II AND III OF THE EXPLORING NUMBER CONCEPTS PROGRAM)**
A sequential mathematics curriculum for 5- and 6-year-old English-speaking children from low-income communities

164 **MATHEMATICS ACTIVITY PACKAGE II (MAP II) (MAY BE USED WITH MAPS I AND III OF THE EXPLORING NUMBERS CONCEPTS PROGRAM)**
A cassette-directed package for teaching basic mathematics skills to 1st-graders from low-income communities

168 **MATHEMATICS GAMES PACKAGE (MAY BE USED WITH EXPLORING NUMBERS CONCEPTS, MAPS II AND III)**
Mathematical games to incorporate skills and concepts found in primary level mathematics programs

170 **MATHEMATICS MUSIC PACKAGE**
A multimedia package which reinforces primary mathematics instruction by associating mathematics concepts to songs

172 **FUNCTIONS PUZZLES COMPUTER ASSISTED INSTRUCTION PROGRAM (FUNPUZ)**
A program designed to give students in grades 2-12 experience in solving problems

174 **MATH FUNCTIONS COMPUTER ASSISTED INSTRUCTION PROGRAM (MATH FUNCTIONS)**
A program which teaches problem solving by an inductive method to students in grades 2-6

176 **NUMBER FACTS COMPUTER ASSISTED INSTRUCTION PROGRAM (NUMBER FACTS)**
A program to teach and drill the elementary number combinations found in addition, subtraction, multiplication, and division tables

178 **WORD PROBLEMS COMPUTER ASSISTED INSTRUCTION PROGRAM (WORD PROBLEMS)**
A program which teaches noncomputational skills involved in solving arithmetic word problems to grades 3-7

181 **DEVELOPING MATHEMATICAL PROCESSES**
A program for grades K-6 which provides an intuitive introduction to the major ideas of geometry and statistics

185 **INDIVIDUALIZED MATHEMATICS**
A program for individualized adaptive instruction including independent study for grades K-[illegible]

188 **INDIVIDUALLY PRESCRIBED INSTRUCTION IN MATHEMATICS (IPI), EDITION II**
A multimedia program for grades K-6 with planned transfer of responsibility to the student

191 **INDIVIDUALIZED MIDDLE MATHEMATICS (IMM), LEVELS I AND II**
A mathematics program allowing entry of students at individual rates and work pace

194 **METRIC MEASUREMENT**
An individualized program for students in grades 3-7 giving concrete experience in using the metric system

BASIC SKILLS: Mathematics and Science (Continued)

196 **INDIVIDUALIZED LEARNING FOR ADULTS – MATHEMATICS**
A mathematics curriculum consisting of a carefully structured continuum of skills designed to lead to a 9th-grade mathematics skill level

199 **NUMBER SKILLS PARENT TEACHING PACKAGE**
A portable package designed to teach (individually) children from grades K-3 to match, name, and count the numbers 1-10

202 **MATH COMBINATIONS – ADDITION PARENT TEACHING PACKAGE**
A portable package designed to teach individual children answers to mathematics combination facts in addition

205 **MATH COMBINATIONS – SUBTRACTION PARENT TEACHING PACKAGE**
A portable package designed to teach individual children answers to combination facts in subtraction

208 **CARRYING AND BORROWING PARENT TEACHING PACKAGE**
A package designed for individual instruction of elementary students in carrying and borrowing in addition and subtraction

211 **MATH COMBINATIONS MULTIPLICATION PARENT TEACHING PACKAGE**
A portable package designed to teach individual children answers to combination facts in multiplication

214 **MATH COMBINATIONS – DIVISION PARENT TEACHING PACKAGE**
A portable package designed to teach individual children answers to mathematics combination facts in division

217 **TIME TELLING PARENT TEACHING PACKAGE**
A portable package designed to teach individual children how to tell time to the nearest minute

220 **ELEMENTARY ARITHMETIC DIAGNOSTIC TESTING PACKAGE**
Computer-assisted package for evaluating the mathematics achievement of students in grades 3-6

222 **SWRL LEARNING MASTERY SYSTEM (LMS) FOR ADDISON-WESLEY MATHEMATICS**
A program which augments the effectiveness of the Addison-Wesley program for grades 1-6

225 **SWRL LEARNING MASTERY SYSTEM: HOUGHTON MIFFLIN MATHEMATICS**
A program which augments the effectiveness of the Houghton Mifflin mathematics program for grades 1-6

228 **SWRL PROFICIENCY VERIFICATION SYSTEM: MATH**
A testing program to be used in connection with 10 widely used mathematics text series

230 **CURRICULUM DEVELOPMENT IN ELEMENTARY MATHEMATICS: NINE PROGRAMS**
Descriptions of nine mathematics programs that grew from the education reform efforts of the 1950's

231 **GOING METRIC: AN ANALYSIS OF EXPERIENCES IN FIVE NATIONS AND THEIR IMPLICATIONS FOR U.S. EDUCATIONAL PLANNING**
A report to help planners and policymakers benefit from the metrication experiences of other countries

233 **METRIC IN-SERVICE TEACHER TRAINING: LEARNING FROM THE ENGLISH AND AUSTRALIAN EXPERIENCE**
A report which offers recommendations to assist in the planning of metric teacher-training programs

235 **MINICOURSE 5: INDIVIDUALIZING INSTRUCTION IN MATHEMATICS**
A program to help 4th- to 6th-grade teachers improve their skills in tutoring mathematics students

237 **ELEMENTARY SCIENCE INFORMATION UNIT**
A review of six science curriculums to aid school personnel in deciding which of the programs suits their own situation

239 **INDIVIDUALIZED SCIENCE (IS)**
A basal science program closely integrated with an individualized learning management system

244 **INQUIRY ROLE APPROACH (ADAPTED FOR USE WITH SILVER BURDETT'S HIGH SCHOOL PROGRAM "BIOLOGY")**
A complete instructional system for teaching secondary-level biology

247 **"MEN AND IDEAS" FILMSTRIPS SERIES**
Filmstrips which explore some of the interactions between science and society, as well as the differences among scientists as individuals

BASIC SKILLS: Reading and Language Arts

251 **OVERVIEW**

253 **SWRL/GINN SPELLING PROGRAM**
A program for conducting sequential spelling instruction for children in grades K-6

257 **SWRL/GINN COMPOSITION PROGRAM**
A program for conducting sequential composition instruction for children in grades K-6

260 **SWRL/GINN EXPRESSIVE LANGUAGE PROGRAM**
A program designed to develop the oral language and expressive skills of elementary schoolchildren

263 **SWRL/GINN BEGINNING READING PROGRAM (BRP)**
A program to help children with sequential instruction in beginners' reading, generally used in kindergarten

BASIC SKILLS: Reading and Language Arts (Continued)

266 **SWRL/GINN READING PROGRAM**
A program to assess the reading level of students in grades K-12

269 **SWRL/GINN ADVANCED READING PROGRAM**
A program used in grades 4-6 which emphasizes critical reading

272 **TEACHING STRATEGIES IN COMMUNICATION**
A package for 9th-grade students who are not succeeding in the usual language arts approaches

275 **PRE-READING SKILLS PROGRAM (PRS)**
A program which insures that children will be ready to learn to read when they begin formal reading instruction

279 **WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): WORD ATTACK**
A program which enables the teacher to focus instruction on specific reading development of students in grades K-6

283 **WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): STUDY SKILLS**
Behavioral objectives that a child must master to read maps, graphs, and tables

287 **WISCONSIN DESIGN FOR READING SKILL DEVELOPMENT (WDRSD): SELF-DIRECTED, INTERPRETIVE, AND CREATIVE READING**
The basis for a skill-oriented approach to the teaching of reading in grades K-6

290 **THE SPELLING PROOF PROGRAM (SPRUF)**
A program that requires the student to choose the correctly spelled word from a set to complete an analogy or a sentence

292 **THE DRILL AND PRACTICE SPELLING PROGRAM (DPSPEL) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM)**
A program that provides practices in spelling root words and adding prefixes and suffixes

294 **THE TRY SPELLINGS PROGRAM (TRYSPL) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM)**
A program that allows children to generate multiple spellings for a word they wish to spell and then choose one that looks correct

296 **THE SPELLING PATTERNS PROGRAM (SPLAT) (PART OF THE COMPUTER ASSISTED ELEMENTARY SPELLING PROGRAM**
A program teaching the concept that a target sound can be spelled by alternative letters or graphemes

298 **SWRL LANGUAGE ANALYSIS PACKAGE**
A computer-assisted package which enables the user to reduce textual data to a form amenable to analysis

300 **COLOR KEYS TO READING. (FORMERLY CALLED STEPPING STONES TO READING)**
A program based on the concept that symbols presented to the beginning reader must be limited

303 **SYSTEMATIC PROGRESS IN READING AND LITERATURE (SPIRAL)**
An individualized program for grades 4-6 to maximize reading comprehension and application

307 **INDIVIDUALLY PRESCRIBED INSTRUCTION IN READING (IPI READING)**
A reading program of sequenced reading skills organized into units and levels of work

310 **INDIVIDUALIZED SPELLING AND WRITING PATTERNS (ISWP)**
An individualized spelling series to enable children in grades 2-6 to master the spelling of most commonly used words

313 **THE NEW PRIMARY GRADES READING SYSTEM**
An individualized adaptive system for teaching reading skills to students in grades 1-3

317 **THE SPELLING PROGRAM**
An individualized program designed to allow students to practice and acquire spelling words at their own rate

319 **INDIVIDUALIZED LEARNING FOR ADULTS – COMMUNICATIONS SKILLS**
A program which concentrates on the systematic development of reading ability

322 **BLENDING SOUNDS PARENT TEACHING PACKAGE**
A portable package designed to teach children in the elementary grades to "sound out" words

325 **SOUND SYMBOL PARENT TEACHING PACKAGE**
A portable package designed to teach the sounds of letters to elementary schoolchildren in grades 5-12

328 **VOCABULARLY BUILDING PARENT TEACHING PACKAGE**
A portable package to increase the reading ability of students in grades 8-12

331 **WORD RECOGNITION PARENT TEACHING PACKAGE**
A portable package designed to increase the elementary schoolchild's speed in recognizing words that are not possible to sound out

334 **SWRL PROFICIENCY VERIFICATION SYSTEM: READING**
A system developed to operate in connection with 10 widely used reading text series

336 **SYSTEM FOR OBJECTIVE-BASED ASSESSMENT – READING (SOBAR)**
A program to assess the reading level of students in grades K-12

BASIC SKILLS: Reading and Language Arts (Continued)

338 **COORDINATED HELPS IN LANGUAGE DEVELOPMENT (CHILD)**
A teacher's guide to expand the verbal power of kindergarten children

340 **DIAGNOSTIC AND PRESCRIPTIVE READING INSTRUCTION PROGRAM (DPRI)**
A multimedia program to enable teachers to diagnose and correct children's specific reading problems

342 **MINICOURSE 2: DEVELOPING CHILDREN'S ORAL LANGUAGE**
A multimedia program to train teachers of grades K-3 to help students speak and think with more precision and flexibility

345 **MINICOURSE 18: TEACHING READING AS DECODING**
A self-instructional training sequence for teachers of beginning readers in grades K-3

348 **MINICOURSE 22: TEACHING READING COMPREHENSION**
A teacher training sequence to improve student comprehension in the reading process

350 **AIDS TO CURRICULUM PLANNING: ENGLISH LANGUAGE ARTS K-12**
A set of aids which are excerpts of representative curriculum guides

351 **ALTERNATIVES IN ENGLISH: A CRITICAL APPRAISAL OF ELECTIVE PROGRAMS. ERIC/RCS INFORMATION ANALYSIS SERIES: GROUP I**
A study of elective programs in English curriculums of American high schools during the last decade

352 **COMMUNICATION SKILLS ORIENTED CURRICULUM GUIDE**
A program aimed at organizing the communication skills of students in grades K-12

354 **LANGUAGE LEARNING, LANGUAGE DEVELOPMENT: A BIBLIOGRAPHY**
A reference to materials on language development and language learning for preschool children

355 **MISCUE ANALYSIS: APPLICATIONS TO READING INSTRUCTION**
A series of essays on the subject of miscue analysis

356 **RECOMMENDED ENGLISH LANGUAGE ARTS CURRICULUM GUIDES K-12 AND CRITERIA FOR PLANNING AND EVALUATION, 1974**
An annotated list of curriculum guides for schools revising their language arts programs

357 **TEACHER EFFECTIVENESS IN ELEMENTARY LANGUAGE ARTS: A PROGRESS REPORT**
A survey of recent research on teacher behaviors associated with pupil "success"

BASIC SKILLS: Reasoning and Problem Solving

359 **OVERVIEW**

363 **ACHIEVEMENT COMPETENCE TRAINING (ACT)**
A multimedia course to teach 5th- through 7th-graders a strategy for setting and achieving their own goals

367 **INVESTIGATING YOUR ENVIRONMENT**
An instructional unit allowing secondary students to select and investigate an environmental question

370 **LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1**
A program to develop skills that promote intellectual development and reasoning ability in preschoolers and 1st-graders

374 **LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1, TEACHER ORIENTATION PACKAGE**
A multimedia instructional program for teaching essential comprehension and reasoning skills to students in grades 2-6

376 **LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 1, MASTERY LEARNING CRITERION TESTS**
A series of tests to evaluate student achievement on content of the LAT-1 instructional program

379 **LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 2**
A program to develop critical listening skills for children in grades 2-6

382 **LANGUAGE AND THINKING PROGRAM (LAT), LEVEL 2, TEACHER ORIENTATION PACKAGE**
A package to provide orientation for teachers to the LAT-2 instructional program

384 **MAKING JUDGMENTS**
An instructional package that teaches students in grades 6-9 skills of critical thinking

386 **THE PERCEPTUAL SKILLS CURRICULUM**
A set of four programs to teach preschool children basic skills before they enter formal instructional programs

389 **SWRL/GINN INSTRUCTIONAL CONCEPTS PROGRAM (ICP)**
A program which provides resources for teaching children conceputal skills fundamental to academic achievement

392 **LOGO TEACHING MANUAL**
A self-instructional manual designed to enable students in grades 4-8 to learn computer language

394 **SERIES COMPUTER ASSISTED INSTRUCTION PROGRAM (SERIES)**
A sequenced program to give students in grades 2-12 experience in solving problems

BASIC SKILLS: Reasoning and Problem Solving (Continued)

396 **DEVELOPMENT OF HIGHER LEVEL THINKING ABILITIES (HLTA)**
An instructional system in which teachers learn strategies that increase students' abilities to solve problems

398 **FACILITATING INQUIRY IN THE CLASSROOM**
An instructional system which trains teachers in behaviors which encourage students to inquire and become autonomous learners

400 **INSTRUCTIONAL STAFF DEVELOPMENT**
A multimedia program to train teachers to exhibit behaviors which lead to inquiry-skill development in students

402 **MINICOURSE 9: HIGHER COGNITIVE QUESTIONING**
A training course for preparing teachers to help students (grades 4-8) to think carefully and logically

404 **TEACHING CHILDREN HOW TO THINK: SYNTHESIS, INTERPRETATION AND EVALUATION OF RESEARCH AND DEVELOPMENT ON CREATIVE PROBLEM SOLVING**
A guide to assist elementary teachers in material selection and development for problem solving and creativity instruction

406 **THINKING AND REASONING TEACHER DEVELOPMENT**
A teacher training kit to promote the development of children's analytic thinking and problem-solving skills

EARLY CHILDHOOD EDUCATION

411 **OVERVIEW**

415 **CLASSIFICATION AND COMMUNICATION SKILLS CURRICULUM (PART OF THE EARLY LEARNING PROGRAM)**
An individualized instructional program designed to teach preschool and kindergarten children basic skills in classification and communication

418 **QUANTIFICATION SKILLS CURRICULUM (PART OF THE EARLY LEARNING PROGRAM)**
An individualized instructional program designed to teach preschool and kindergarten children basic mathematics concepts

421 **THE EXPLORATORY LEARNING PROGRAM (PART OF THE EARLY LEARNING PROGRAM)**
A program designed to teach children, preschool to 2d grade, to integrate skills that have been learned in other structured curriculums

424 **CONCEPTS AND LANGUAGE PROGRAM**
Twelve curriculum units to stimulate intellectual and social development for low-income multiethnic children ages 5 and 6

428 **GETTING STARTED (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)**
A training manual for kindergarten teachers that implements planned learning experiences for preschool children

430 **CLASSROOM MANAGEMENT, K-1 (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)**
A training manual describing teacher behaviors and attitudes that create an interesting and smooth-running classroom for grades K-1

432 **DARCEE PRESCHOOL PROGRAM**
Materials for use with children from ages 3 to 5 providing planned activity sequences for preschool teachers

436 **IMPROVING MOTOR-PERCEPTUAL SKILLS (IMPS)**
A teacher's manual containing 34 activities for improving motor perception of children from ages 4 to 7

438 **LEARNING ACTIVITIES FOR USE BY CLASSROOM TEACHERS, COLLATED TO 58 DEVELOPMENTAL COMPETENCIES FOR PRESCHOOL CHILDREN (AGES 3-5)**
Learning activity cards to guide classroom activity selections for classroom teachers of children from ages 3 to 5

440 **LEARNING ACTIVITIES FOR USE BY HOME VISITORS AND PARENTS, COLLATED TO 58 COMPETENCIES FOR PRESCHOOL CHILDREN (AGES 3-5 YEARS)**
Learning activity cards to guide home visitors and parents of 3- to 5-year-olds in learning activities in the home

442 **THE SELF-SCHEDULE SYSTEM**
An instructional learning-management system to allow children to work on both structured and unstructured learning activities in one classroom setting

445 **INFANT RATING SCALES FOR USE BY CAREGIVERS IN DAYCARE CENTERS**
Eight numeric scaling instruments measuring the psychological characteristics and competencies of infants from 3 to 15 months

448 **KRISP—KANSAS REFLECTION-IMPULSIVITY SCALE FOR PRESCHOOLERS**
A test instrument which identifies those learning styles of children from ages 3 to 5-1/2 that may handicap later educational development

451 **TEST FOR THE ASSESSMENT OF BASIC SKILLS (TABS) FORM A, FORM B**
An individually administered, domain-referenced test to measure cognitive skills in children ages 4 and 5

454 **A COMPETENCY BASE FOR CURRICULUM DEVELOPMENT IN PRESCHOOL EDUCATION**
A four-volume report defining child competencies and behavioral objectives for early childhood curriculum developers

EARLY CHILDHOOD EDUCATION (Continued)

456 **A GOOD BEGINNING FOR BABIES: GUIDELINES FOR GROUP CARE**
Guidelines for maintaining quality group care for infants during the 1st year of life

458 **INTRODUCTION TO EARLY CHILDHOOD EDUCATION (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A teaching manual that explains responsive education to teachers

460 **UNDERSTANDING AND ASSESSING THE INTELLECTUAL DEVELOPMENT OF YOUNG CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)**
Handbooks and video tapes to acquaint teachers of children from ages 4 to 8 with Piaget's theory of mental development

462 **DEVELOPING CHILDREN'S CLASSIFICATION SKILLS (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A guide for teaching those working with preschool children about concept formation

464 **ENRICHING LITERATURE EXPERIENCES FOR YOUNG CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A two-volume unit to guide teachers in teaching literature creatively to children from ages 4 to 8

466 **DEVELOPING CHILDREN'S SENSE PERCEPTION (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A two-volume unit for teachers of children from grades pre-K to 3 to increase teachers' understanding of sense perception

468 **HELPING CHILDREN DEVELOP HEALTHY SELF-CONCEPTS (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A learner's guide for teachers of children from grades pre-K to 3, discussing methods that can be used by a teacher to help promote healthy self-concepts in children

470 **OBSERVING AND EXTENDING CHILDREN'S PLAY ACTIVITIES (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A learner's guide for teachers of children from ages 4 to 8 focusing on the importance of play to a child's growth and development

472 **PROBLEM-SOLVING WITH YOUNG CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A two-volume unit to help adults working with children from ages 4 to 8 set up a problem-solving classroom setting

474 **TEACHING CHILDREN TO INTEGRATE LANGUAGE EXPERIENCE (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A unit for teachers of grades pre-K to 3 to create a responsive language program for and with the children

476 **USING TOYS AND GAMES WITH CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A two-volume unit to teach adults working with children from grades pre-K to 3 how to use toys and games to help children acquire cognitive skills and develop a healthy self-concept

478 **ARRANGING THE CLASSROOM FOR CHILDREN (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A teacher's guide which focuses on physical aspects of a learning environment for children from ages 3 to 8

480 **MANAGING THE PRESCHOOL CLASSROOM (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A learner's and instructor's guide to teach teachers of preschool children how to better manage and organize the classroom

482 **COMMUNICATING WITH PARENTS (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A learner's guide to help improve communications between parents and teaching staff at all grade levels

484 **MANUAL FOR OPERATING AN INFANT CARE CENTER**
Six guides for the operation of day care centers for infants from 3 weeks to 14 months

486 **MULTIMEDIA TRAINING PACKAGE FOR PARAPROFESSIONAL TEACHERS "SETTING THE SCENE FOR GOOD CLASSROOM BEHAVIOR"**
Multimedia training package for helping paraprofessionals who work with preschool children learn basic principles of classroom arrangement and maintenance

489 **PROCEDURES FOR THE DAILY OPENING AND CLOSING OF A DAY CARE CENTER**
A checklist for monitoring the daily opening and closing routines of day care centers

491 **SCHOOL BEFORE SIX: A DIAGNOSTIC APPROACH**
A comprehensive manual of diagnostic procedures and activities for preschool children

493 **TEACHER EXPECTATIONS EARLY ELEMENTARY PROGRAM**
A three-chapter training package to help kindergarten teachers with classroom management problems that might be caused by teaching behavior

495 **HOME-ORIENTED PRESCHOOL EDUCATION (HOPE)**
A system for delivering comprehensive home-oriented preschool education for 3- to 5-year-olds in rural Appalachia

498 **HOME VISITOR TRAINING PACKAGE (HVTP)**
Materials for 2-week training sessions for beginning home visitors who will work with parents to help increase the development of their children.

501 **HOME VISITING WITH MOTHERS AND INFANTS**
A home-visiting approach to increase infant educability

503 **MATERIALS FOR INFANT DEVELOPMENT**
A description of 40 toys and other objects that can be used to promote infant development in the home

EARLY CHILDHOOD EDUCATION (Continued)

505 **MULTIMEDIA TRAINING PACKAGE FOR PARENTS "LIVING AND LEARNING IN THE HOME"**
A multimedia training package for low-income parents of preschool children for teaching their children at home

507 **PARENT/CHILD TOY-LENDING LIBRARY**
A toy library that helps parents learn how to teach problem solving skills to 3- and 4-year-old children

510 **TEACHING YOUR CHILD, A TELEVISED PARENT TRAINING PROGRAM**
A guidebook and a television program to provide basic concepts in child rearing to the parents of economically disadvantaged preschool children.

512 **TV SPOT ON READING TO YOUR CHILD**
A television spot announcement and booklet to convey basic child-rearing skills to low-income parents of preschool children

514 **CHILDREN'S FRIENDSHIPS IN SCHOOL SETTINGS**
Existing research on children's friendships in nursery and elementary school settings

515 **COGNITIVE DEVELOPMENT IN YOUNG CHILDREN: A REPORT TO TEACHERS**
A review of psychological research on cognitive development in children from ages 3 to 8 with suggestions to teachers on how to apply the research findings

517 **A COLLECTION OF PAPERS FOR TEACHERS**
Four papers on selected issues in early childhood education

518 **A COMPARISON OF PROVISIONS IN STATE AND FEDERAL STANDARDS FOR INSTITUTIONAL DAY CARE**
A comparison of State provisions for institutional day care

520 **A CROSSCULTURAL ANALYSIS OF THE CHILD CARE SYSTEM**
An overview of child care systems in the United States, Sweden, Israel, and China

521 **DAY CARE: AN ABSTRACT BIBLIOGRAPHY (SUPPLEMENT NO. 1)**
A bibliography of documented abstracts of materials in the ERIC system that relate to day care programs

522 **DISCIPLINE AND BEHAVIOR: AN ABSTRACT BIBLIOGRAPHY**
A bibliography of ERIC documents on discipline and behavior modification

523 **EARLY CHILDHOOD EDUCATION PROGRAM AND RESEARCH SUPPORT LITERATURE: A STATE OF THE ART REVIEW**
A comparison of the results of 19 early childhood programs of the 1960's

525 **EARLY CHILDHOOD INFORMATION UNIT**
A multimedia information unit that informs decisionmakers of alternative early childhood educational models for grades pre-K to 3

527 **EARLY CHILDHOOD NEWSLETTERS: A SELECTED GUIDE**
A comprehensive listing of early childhood newsletters, journals, and magazines

528 **EARLY CHILDHOOD RESEARCH: SECOND THOUGHTS AND NEXT STEPS**
An overview of early childhood research for those concerned with future planning

529 **EDUCATION FOR PARENTS OF PRESCHOOLERS: AN ABSTRACT BIBLIOGRAPHY**
Bibliography of 108 ERIC documents on parent education and involvement during children's preschool years

530 **ISSUES AND PROCEDURES IN TESTING YOUNG CHILDREN: ERIC/TM REPORT 37**
A report discussing characteristics of children and the limitations of testing when small children are examined

531 **DISCUSSION GUIDE FOR PARENT GROUPS BASED ON 58 CHILD DEVELOPMENTAL COMPETENCIES FOR USE WITH HOME-ORIENTED PRESCHOOL PROGRAMS**
Two resource documents, a parent guide and a parent coordinator guide, to increase parent effectiveness in fostering learning and development in their preschool children

533 **HEAD START AND FOLLOW THROUGH, 1972-1974: AN ERIC ABSTRACT BIBLIOGRAPHY**
A bibliography of 123 ERIC documents on the Head Start and Follow Through programs

534 **INFANT EDUCATION AND STIMULATION (BIRTH TO 3 YEARS): A BIBLIOGRAPHY**
A bibliography of research reports on infant education and stimulation

535 **CURRENT RESEARCH AND PERSPECTIVES IN OPEN EDUCATION**
A publication of selected presentations of a National Conference on Open Education

536 **MOVEMENT EDUCATION FOR PRESCHOOL PROGRAMS (NATIONAL PROGRAM ON EARLY CHILDHOOD EDUCATION)**
An illustrated discussion of physical exercise needs of preschool children

538 **NEW DIRECTIONS FOR EARLY CHILD DEVELOPMENT PROGRAMS: SOME FINDINGS FROM RESEARCH**
An overview of preschool studies and programs of the 1960's

539 **NINE MODEL PROGRAMS FOR YOUNG CHILDREN**
A two-volume survey of nine model preschool programs

541 **NOTES ON THE DISTINCTION BETWEEN EDUCATION AND EXCITEMENT**
A comparison of the educational outcomes of alternative teaching methods

EARLY CHILDHOOD EDUCATION (Continued)

542 **PARENTING MATERIALS INFORMATION CENTER (PMIC)**
A system for the collection and dissemination of parenting materials in basic child care practices

544 **PSYCHOLOGICAL PERSPECTIVES AND EARLY CHILDHOOD EDUCATION: SOME RELATIONS BETWEEN THEORY AND PRACTICE**
Three approaches to psychological programing in early childhood education

545 **RESPONSIVE CARE CLASSROOM: SOURCE BOOKS AND A HANDBOOK FOR ADMINISTRATORS**
An administrator's handbook and three sourcebooks for running a preschool for children from ages 3 to 6

547 **REVIEW AND INDEX TO TESTS AND MEASUREMENTS FOR EARLY CHILDHOOD EDUCATION**
An index and reference of 800 early childhood-assessment tests for children from birth to 8 years

549 **SELF-CONCEPT: AN ABSTRACT BIBLIOGRAPHY**
An annotated bibliography of ERIC documents dealing with development of self-concept in young children

550 **WORKING WITH PARENTS IN THE PRIMARY SCHOOL**
An annotated bibliography of ERIC documents on parent participation at the primary school level

EDUCATION AND WORK (CAREER EDUCATION): Administration and Staff Development

553 **OVERVIEW**

559 **THE ADMINISTRATION OF CAREER EDUCATION**
Products to allow an administrator to examine career education and its implications for an educational program

562 **ATTITUDES TOWARD CAREER EDUCATION**
A program to foster more favorable participant attitudes toward career education

564 **GENERAL ORIENTATION TO CAREER EDUCATION–AN INDIVIDUAL APPROACH**
An individualized approach to familiarize administrators with career education

566 **THE COMMUNITY AND SCHOOL BASED CAREER EDUCATION**
A planning guide for school practitioners who are responsible for involving the community in career education

568 **DEVELOPING LOCAL CAREER INFORMATION SYSTEMS FOR MIDDLE AND SECONDARY SCHOOLS**
A handbook for developers planning to implement a career information system

570 **AN ORIENTATION TO CAREER EDUCATION–GROUP APPROACH**
Products to provide general career education orientation to teachers and administrators

572 **STAFF AWARENESS: RACIAL, SOCIOECONOMIC, SEX STEREOTYPES, LIMITED CAREER POTENTIAL**
Products to help teachers increase their expectations of career potentials of all students

574 **STAFF DEVELOPMENT IN CAREER EDUCATION FOR THE ELEMENTARY SCHOOL**
Materials to provide general career orientation to all teachers, with special emphasis on elementary teachers

576 **STAFF DEVELOPMENT GUIDELINES FOR CAREER EDUCATION**
Guides for school personnel on the role of the inservice coordinator within career education programs

578 **STAFF DEVELOPMENT PROGRAM FOR THE IMPLEMENTATION OF CAREER EDUCATION**
Products for local school district personnel who will conduct teacher training programs in career education

580 **STAFF DEVELOPMENT PROGRAM FOR PROMOTING EFFECTIVE USE OF COMMUNITY RESOURCES IN CAREER EDUCATION**
Guides for school staff members to help generate extensive use of community resources in career education

582 **A TRAINING PROGRAM FOR THE IN-SERVICE COORDINATOR IN CAREER EDUCATION**
Training products to familiarize school personnel with functions of the inservice coordinator in career education programs

584 **TEACHER AIDES IN CAREER EDUCATION**
Guides to create awareness of potential contribution of community helpers to career education programs

586 **MANAGEMENT INFORMATION SYSTEM FOR VOCATIONAL EDUCATION (MISVE)**
A system for managers to increase accountability through the improved utilization of information

588 **MODULE DEVELOPMENT HANDBOOK (A PRODUCT OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)**
A handbook to assist teacher educators and administrators in the development of performance-based instructional modules

590 **ORIENTATION TO MODULARIZED INSTRUCTION BOOKLET (A PRODUCT OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)**
A booklet to assist teacher education faculties develop necessary concepts regarding performance-based instruction

EDUCATION AND WORK (CAREER EDUCATION): Administration and Staff Development (Continued)

592 **PROFESSIONAL VOCATIONAL TEACHER EDUCATION MODULES (118) (PRODUCTS OF THE PERFORMANCE-BASED PROFESSIONAL EDUCATION CURRICULA PROGRAM)**
Vocational teacher curricular materials for vocational education training

595 **CAREER EDUCATION IN THE ELEMENTARY SYSTEM**
A training course in career education in elementary schools consisting of video taped instructional units

597 **CURRICULUM CONTENT DERIVATION SYSTEM: A USER'S MANUAL OF PROCEDURES AND GUIDELINES**
A system offering curriculum developers a data-based approach to deriving program content of occupational preparation

600 **AN ANNOTATED BIBLIOGRAPHY FOR THE IMPLEMENTATION OF OCCUPATIONAL CLUSTERS**
A bibliography of documents relating to 15 Office of Education occupational clusters

601 **CAREER EDUCATION—A HUMANISTIC VIEW (PART 3 OF THE ERIC CLEARINGHOUSE ON TEACHER EDUCATION PROJECT ON CAREER EDUCATION)**
A monograph examining the career education concept

602 **CAREER EDUCATION PRODUCT INSTALLATION HANDBOOK**
A resource book to increase one's ability to formulate career education product utilization strategies

604 **CAREER INITIATION WHEN ALIENATION FROM SECONDARY SCHOOL OCCURS: A REVIEW OF THE LITERATURE**
A synthesis of ERIC and other literature on career education programs for secondary school dropouts

605 **THE CONTINUING EDUCATION UNIT**
A book to illustrate forms and procedures needed to implement a continuing education unit

606 **DIRECTORY OF VOCATIONAL INFORMATION RESOURCES IN THE UNITED STATES**
A directory of primary vocational information resources in each State

607 **EPIE CAREER EDUCATION S*E*T* (SELECTION AND EVALUATION TOOLS)**
A two-volume guide for the selection and evaluation of career education instructional materials

609 **IMPLEMENTATION OF OCCUPATIONAL CLUSTER CONCEPTS**
A narrative pertaining to the organizing and synthesizing of literature on occupational clusters

610 **THE ROLES OF THE TEACHER, THE COUNSELOR, THE COMMUNITY, AND MEDIA IN CAREER GUIDANCE AND CAREER EDUCATION: A CONCEPTUAL MODEL**
A document synthesizing ERIC and other literature on roles of teacher, counselor, community, and media in career education programs

611 **STRENGTHENING THE RELATIONSHIP OF EDUCATION AND WORK**
A synthesis of ERIC and other literature on education and work

EDUCATION AND WORK (CAREER EDUCATION): Career Awareness and Exploration

613 **CAREERS IN TECHNOLOGY**
A guide to acquaint students in grades 2-4 with machines and the concept of technology

615 **EXPLORING THE WORLD OF WORK**
A guide to acquaint students in grades 2 and 3 with occupational areas

617 **CAREER EDUCATION CONCEPT LESSON CARDS**
A program to provide career awareness to students in grades K-6

619 **BASIC MEASUREMENT AND RELATED CAREERS: A**
Material for kindergarten children on topics of time, weight, money, and length

621 **BASIC MEASUREMENT AND RELATED CAREERS: B**
Topics for 1st-graders including measuring, time, weight, money, length, and volume

623 **BASIC MEASUREMENT AND RELATED CAREERS: C**
A teacher's guide for teaching 3d- and 4th-graders to relate measurement skills to work experiences

625 **BASIC MEASUREMENT AND RELATED CAREERS: D**
A teacher's guide for teaching 3d- and 4th-graders to measure solid and liquid volume

627 **CAREERS IN VISUAL ART**
A guide to acquaint students in grades 4-6 with some great achievements in fine art

629 **CAREER EXPLORATION IN EARTH SCIENCES**
A guide to introduce students (grade 8) to the earth sciences

631 **CAREER EXPLORATION IN THE LIFE SCIENCES**
A guide to acquaint students in grades 7-9 with ecology, zoology, and medicine

633 **CAREER EXPLORATION IN THE PHYSICAL SCIENCES**
A guide to acquaint 9th-graders with chemistry, physics, geology, metallurgy, and general science

635 **ELEMENTS OF COMPUTER CAREERS**
A course teaching high school students how people operate and use computers

638 **ECONOMIC AND CAREER AWARENESS: A**
A guide to provide students in grades 1-4 with an awareness of the family as an economic unit

EDUCATION AND WORK (CAREER EDUCATION):
Career Awareness and Exploration (Continued)

640 **ECONOMIC AND CAREER AWARENESS: B**
A guide with an emphasis on consumer knowledge, for grades 1-4

642 **ECONOMIC AND CAREER AWARENESS: C**
A guide to familiarize students in grades 1-4 with basic economic terms and concepts

644 **COMMUNITY SERVICE WORKERS**
Materials to acquaint primary grade students with services performed by various workers in the community

646 **CAREER EXPLORATION THROUGH MATHEMATICS**
A guide for career education teachers helping students in grades 8-10 to develop and reinforce mathematical skills

648 **MATHEMATICS AND RELATED CAREERS: B**
A guide to help students in grades 9 and 10 to develop and reinforce mathematical skills

650 **CREATING GREETING CARDS: A BUSINESS BRINGS PLEASURE**
A guide which allows students (grades 2-4) to participate in the creation and production of greeting cards

652 **LEARNING ABOUT BUSINESS**
A guide to help primary grade students understand interrelationships among businesses, workers, and families

654 **MAKING TOYS THROUGH TEAMWORK**
A guide to acquaint students in grades 4-6 with wood construction and mass production

656 **THE SUPERMARKET**
A guide to acquaint students in grades 2-4 with the food industry

658 **THE SERVICE STATION**
A guide to acquaint 2d-graders with the service station as part of the community

660 **PEOPLE WHO WORK WITH ANIMALS**
A guide to provide primary grade students with awareness of careers available for people who work with animals

662 **PHYSICAL EDUCATION FOR TOMORROW**
Materials for preschool and primary grade students to realize self-awareness by performing basic motor skills

664 **WORKING WITH TREES**
A guide to acquaint students in grades 3 and 4 with the products and services trees provide

666 **INDIVIDUALIZED APPROACH TO INSTRUCTION IN FOUNDATION EDUCATION**
Foundation education for students entering occupational training

EDUCATION AND WORK (CAREER EDUCATION):
Career Counseling

669 **THE CAREER DEVELOPMENT SERIES (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
Information and practical suggestions on several major areas of career development

671 **DEVELOPING CAREER-RELATED MATERIALS FOR USE WITH AND BY ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A discussion of ways to gather, organize, and present data on occupational projections

673 **ATTRACTING CLIENTS TO SERVICE-ORIENTED PROGRAMS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A product which discusses the principles and issues involved in advertising and promoting inservice oriented community-based career education programs

675 **DESIGNING AND OPERATING A CAREER COUNSELING SERVICE FOR ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A manual to show how to plan, establish, and operate a comprehensive counseling service

677 **ESTABLISHING AND OPERATING A CAREER RESOURCE CENTER FOR ADULTS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
Specific guidelines for establishing a resource center of career-related materials for adults

679 **EXTERNAL DEGREE STUDY: A NEW ROUTE TO CAREERS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
An alternative form of postsecondary education

681 **FROM LIBERAL ARTS AND SCIENCES TO CAREERS: A GUIDE (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A booklet to help students to identify and develop professional competencies resulting from liberal arts studies and experiences

683 **INTEGRATING RESEARCH AND EVALUATION INTO THE OPERATION OF SERVICE-ORIENTED PROGRAMS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A manual to help plan, establish, and operate a comprehensive counseling service

685 **BIBLIOGRAPHIES OF CAREER-RELATED MATERIALS (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A shelf collection list and a series of annotated bibliographies of career-related materials

EDUCATION AND WORK (CAREER EDUCATION): Career Counseling (Continued)

687 **REPORT ON FIFTY SELECTED CENTERS OFFERING CAREER COUNSELING SERVICES FOR WOMEN (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A telephone study of selected counseling centers to collect data for the purpose of improving a research and development model

689 **CHRIS BEGINS AGAIN**
A film produced to illustrate the career-related needs of adults

690 **TALKING WITH CLORAE AND ALBIE/ (WORKING TITLE)/(PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A film to make young people aware of some of the problems and solutions encountered in the search for career training

692 **CAREER GUIDANCE UNITS**
A program to help students gain greater understanding of themselves by facilitating development of exploratory and decisionmaking skills

695 **CAREER INFORMATION SYSTEMS (CIS)**
A system designed to serve as the career information component of career education programs

698 **OPERATION GUIDANCE (AN ELEMENT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)**
A self-help program aimed at providing high schools with the capability to improve career guidance programs

701 **COMMUNICATION AND YOU**
A teacher guide to allow intermediate students to discover the complexities of communication

704 **JUST ME**
A teacher guide for helping 1st-grade students realize that individuals are unique

706 **INSTRUCTIONAL HANDBOOK: COPING IN THE WORLD OF WORK: PRACTICE IN PROBLEM SOLVING (CPSS) (A PRODUCT OF THE CAREER PLANNING SUPPORT SYSTEM (CPSS))**
An instructional unit designed to ease the transition of 11th- and 12th-grade students from school to work

709 **MYSELF AND OTHERS AT HOME AND SCHOOL**
A teacher guide to encourage students in grades 1-3 to deal with an expanded idea of self

711 **SELF-APPRAISAL FOR DECISION MAKING AND CAREER PLANNING**
A teacher guide intended to lead the secondary-level student to self-awareness

713 **UNDERSTANDING SELF**
A teacher guide to learning experiences for students in grades 8-10 to increase self-perception and career awareness

715 **YOUR PERSONALITY, YOUR HEALTH, YOUR JOB**
A teacher guide to learning experiences for students (grades 8-11) that focus on various elements of career education

717 **SELF-DIRECTED CAREER PROGRAM (SDC)**
A vocational guidance system designed to provide effective, theoretically based guidance at low cost

720 **CAREER COUNSELING IN COMMUNITY COLLEGES**
A product that allows counselors to train themselves to reuse effective career counseling techniques

722 **CAREER GUIDANCE RESOURCE CENTER**
A guide for those who wish to implement the research center concept in career education

723 **THE COMPUTER AND GUIDANCE IN THE UNITED STATES: PAST, PRESENT, AND A POSSIBLE FUTURE**
Five available computer guidance systems

724 **LIFE CAREER PLANS: REVIEWING AND RENEWING**
A plan for helping adults review and perhaps change career plans

725 **A COMPREHENSIVE VIEW OF CAREER DEVELOPMENT**
Actual programs and practices in career guidance that clarify goals and objectives

726 **AGE-INCOME GRAPHS BY SEX FOR 336 OCCUPATIONS**
A set of graphs which forces students to consider income over the lifespan rather than just the entering salary

728 **THE CAREER DATA BOOK (INCLUDING "STUDENT'S BOOKLET")**
A resource book which provides detailed information about career plans of persons 5 years out of high school

731 **USING THE TALENT PROFILES IN COUNSELING: A SUPPLEMENT TO PROJECT TALENT'S CAREER DATA BOOK**
Suggestions for the use of TALENT profiles in counseling

733 **SOURCES OF INFLUENCE ON CAREER DECISION MAKING AND THEIR IMPACT ON CAREER ATTAINMENT: A HANDBOOK FOR COUNSELORS AND EDUCATORS (A PRODUCT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)**
A state-of-the-art (career decisionmaking) review

EDUCATION AND WORK (CAREER EDUCATION): Work Experience-Based Programs

735 **EXPERIENCE-BASED CAREER EDUCATION (EBCE)**
An inschool and out-of-school secondary school program focused on career development and guidance

738 **EXPERIENCE-BASED CAREER EDUCATION (EBCE)**
An alternative education program that provides comprehensive learning opportunities in the community for 16- to 18-year-olds

EDUCATION AND WORK (CAREER EDUCATION): Work Experience-Based Programs (Continued)

741 **EXPERIENCE-BASED CAREER EDUCATION (EBCE AEL VERSION)**
A comprehensive alternative to traditional secondary school programs allowing students to earn credits through community experiences

745 **FAR WEST LABORATORY EXPERIENCE-BASED CAREER EDUCATION**
An experience-based alternative to traditional secondary school formats

749 **MANAGEMENT INTERNSHIPS: A NEW MODEL FOR YOUTH SOCIALIZATION AND LEARNING**
A report on increasing on-the-job training by means of internships in general work skills

751 **INDIVIDUALIZED APPROACH TO INSTRUCTION AND ANCILLARY MAINTENANCE ACTIVITIES IN FAMILY CORE CURRICULUM**
A course specifically designed as a companion to vocational training oriented toward providing "life skills"

753 **INDIVIDUALIZED APPROACH TO INSTRUCTION IN THE BUILDING TRADES AND SERVICES**
A curriculum designed for those students planning to enter the building trades

756 **INDIVIDUALIZED APPROACH TO INSTRUCTION IN AUTOMOTIVE AND SMALL ENGINE REPAIR**
A method to teach concepts and manipulative tasks related to the repair of automobiles and small engines

757 **INDIVIDUALIZED APPROACH TO INSTRUCTION IN MARKETING AND TOURISM**
A set of courses to train students to enter the job market in marketing and tourism

759 **INDIVIDUALIZED APPROACH TO INSTRUCTION IN OFFICE EDUCATION**
A learning system emphasizing training for entry occupations in office education

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EDUCATIONAL EQUITY: Handicapped

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A kit designed to correct four common speech articulation problems found among children in the primary grades

767 **WEEKLY MEAL SEQUENCE PROGRAM (A PROGRAM TO TEACH FOOD PREPARATION SKILLS TO THE RETARDED)**
A program to teach food preparation skills to handicapped children

769 **LIPPINCOTT'S COMPREHENSION QUESTIONS (SIX BOOKS, D THROUGH I)**
A set of books to evaluate students' literal and inferential comprehension skills

771 **SPECIAL EDITION FOR HEARING IMPAIRED STUDENTS, 1973 STANFORD ACHIEVEMENT TESTS**
A complete achievement test battery adopted for use with hearing-impaired students

773 **LINGUISTICS AND THE LANGUAGE OF DEAF CHILDREN**
A text introducing transformational syntax to teachers of deaf children

774 **THE TRAINING PROGRAM FOR PARENTS AND THERAPISTS OF AUTISTIC CHILDREN (PART OF THE INSTRUCTIONAL SYSTEMS PROGRAM)**
A program to develop instructional programs to remedy the behavioral and learning disorders of autistic children

776 **CONFIGURATIONS OF CHANGE: THE INTEGRATION OF MILDLY HANDICAPPED CHILDREN INTO THE REGULAR CLASSSROOM**
Validated approaches to "mainstreaming"

777 **INTEGRATING HANDICAPPED CHILDREN INTO REGULAR CLASSROOMS (WITH ABSTRACT BIBLIOGRAPHY)**
A discussion of the desirability of integrating handicapped children into regular classrooms

778 **PARENTS AS TEACHERS: A RATIONALE FOR INVOLVING PARENTS IN THE EDUCATION OF YOUNG HANDICAPPED CHILDREN**
A review describing a set of adverse factors that may hamper the development of the handicapped child

779 **UNDERSTANDING YOUNG CHILDREN: EMOTIONAL AND BEHAVIORAL DEVELOPMENT AND DISABILITIES**
A booklet for training regular preschool teachers who work with emotionally and behaviorally handicapped children

780 **UNDERSTANDING YOUNG CHILDREN: LANGUAGE DEVELOPMENT AND LANGUAGE DISABILITIES**
A booklet for training teachers and aides who work with children with language disabilities in their regular classrooms

781 **UNDERSTANDING YOUNG CHILDREN: LEARNING DEVELOPMENT AND LEARNING DISABILITIES**
A booklet for training teachers and aides who work with children with learning disabilities in their regular classrooms to recognize how the factors of heredity, maturation, and environment determine the degree of development an individual will achieve

782 **UNDERSTANDING YOUNG CHILDREN: INTELLECTUAL DEVELOPMENT AND INTELLECTUAL DISABILITIES**
A booklet for training regular classroom teachers and aides who work with children with intellectual disabilities

783 **UNDERSTANDING YOUNG CHILDREN: THE HANDICAPPED CHILD IN THE NORMAL PRESCHOOL CLASS**
A booklet for training teachers and aides who work with aurally, visually, and physically handicapped children

EDUCATIONAL EQUITY: Multicultural/ Bilingual Education

785 **OVERVIEW**

787 **TEACHER INSERVICE TRAINING PROGRAM (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)**
A series of video programs which provides information on teaching techniques for teachers in rural Alaska

789 **ALASKA NATIVE MAGAZINE PROGRAM (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)**
A series of video programs, each designed around a specific topic, relevant to Alaska's adult native population

791 **HEALTH EDUCATION PROGRAM (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)**
A series of video programs, modeled after "Sesame Street," which gives attention to the health problems of 8- to 10-year-old Alaskan children

793 **BASIC ORAL LANGUAGE DEVELOPMENT PROGRAM (BOLD) (PART OF THE ALASKA SATELLITE DEMONSTRATION PROGRAM)**
A series of video programs designed specifically to meet the language arts needs of 5- to 7-year-old native Alaskan children

796 **ALASKAN READERS (ALASKAN READING AND LANGUAGE DEVELOPMENT PROGRAM)**
A comprehensive program for use with rural Alaskan children, grades 1-3, who speak English as a second language

798 **COMMUNICATION ARTS PROGRAM I (CAP I)**
An educational system to advance the communication arts of 3- to 9-year-old children from minority backgrounds

802 **SWRL ENGLISH LANGUAGE AND CONCEPTS PROGRAM FOR SPANISH-SPEAKING CHILDREN (LCS)**
A performance-based program which teaches Spanish-speaking children, grades K-1 to communicate effectively in the English language

805 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL I**
A comprehensive learning system for 3-year-old Spanish-speaking children, their teachers, and parents

809 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL I - THREE YEAR OLDS, INSTRUCTIONAL MATERIALS**
A developmentally oriented program which emphasizes mastery of skills and concepts in 3-year-old Spanish-speaking children

812 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL I, STAFF DEVELOPMENT**
A comprehensive model for teacher preservice and inservice training

815 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL I, PARENT INVOLVEMENT**
A program designed to be used by parents at home to reinforce the materials used by children in school

817 **BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL II**
A comprehensive learning system for 4-year-old Spanish-speaking children, their teachers, and parents

821 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL II, INSTRUCTIONAL MATERIALS**
A developmentally oriented program concerned with mastery of skills and concepts among 4-year-old Spanish-speaking children

824 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL II, STAFF DEVELOPMENT**
A comprehensive model for teacher training, both preservice and inservice

827 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL II, PARENT INVOLVEMENT**
A set of parent activities designed for use at home to reinforce what the children have learned in school

829 **BILINGUAL EARLY CHILDHOOD PROGRAM, LEVEL III**
A comprehensive learning system for 5-year-old Spanish-speaking children, their teachers, and parents

833 **BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL III, INSTRUCTIONAL MATERIALS**
A developmentally oriented program for 5-year-old Spanish-speaking children, concerned with mastery of skills and concepts in eight major areas

836 **BILINGUAL EARLY CHILDHOOD PROGRAM (BECP), LEVEL III STAFF DEVELOPMENT**
A comprehensive model for teacher training, both preservice and inservice

839 **PARENT INVOLVEMENT III**
A system of parent activities to be used at home to reinforce what the children learn in school

841 **PASO A PASO CON LOS NINOS (PART OF THE EARLY CHILDHOOD PROGRAM)**
A collection of songs and dances which can supplement any preschool program

843 **BILINGUAL KINDERGARTEN SYSTEM**
A comprehensive multimedia program to make Spanish-speaking preschool children functionally bilingual

847 **BILINGUAL KINDERGARTEN INSTRUCTIONAL MATERIALS**
A multimedia curriculum to teach 5-year-old Spanish-speaking children English while strengthening their present Spanish-language skills

850 **BILINGUAL KINDERGARTEN PARENT INVOLVEMENT**
A program to aid parents in complementing the school experience

EDUCATIONAL EQUITY: Multicultural/Bilingual Education (Continued)

853 **BILINGUAL KINDERGARTEN STAFF DEVELOPMENT**
An extensive multimedia product designed for preservice and inservice training

856 **VIVIENDO Y APRENDIENDO EN EL HOGAR**
A multimedia training package for Spanish-speaking, low-income parents of preschool children

859 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), GRADE 1**
A comprehensive program including English and Spanish components

863 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH ORAL LANGUAGE, GRADE 1**
A program which employs a modified version of the audiolingual approach to English-as-a-second-language instruction

866 **SPANISH ORAL LANGUAGE, GRADE 1 (PART OF BILINGUAL ORAL LANGUAGE AND READING PROGRAM)**
A program which employs a situational approach in which Spanish is used as a means for conveying ideas and information in meaningful contexts

869 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH READING, GRADE 1**
A program which makes use of the most relevant features of language experience: Sight reading and phonics

872 **SPANISH READING, GRADE 1 (PART OF THE BILINGUAL ORAL LANGUAGE AND READING PROGRAM)**
A systematic program of language experience based on the premise that children will read about things that are of interest to them

875 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), GRADE 2**
A comprehensive program composed of two carefully sequenced and interrelated English and Spanish components

878 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH ORAL LANGUAGE, GRADE 2**
A program which employs a modified version of the audiolingual approach to English-as-a-second-language instruction for learners in grade 2

881 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), SPANISH ORAL LANGUAGE, GRADE 2**
A program which employs a situational approach in which Spanish is used as a means for conveying ideas in meaningful contexts

884 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), ENGLISH READING, GRADE 2**
A product which makes use of the most relevant features of language experience: Sight reading and phonics for learners in grade 2

887 **BILINGUAL ORAL LANGUAGE AND READING (BOLAR), SPANISH READING, GRADE 2**
A product which makes use of the most relevant features of both the language experience and the sound-to-symbol approaches to reading instruction in grade 2

890 **ABE READINESS MATERIALS**
Bilingual instructional packages to fill the void in materials available for teaching undereducated Mexican-American adults

892 **SYSTEMS APPROACH TO LESSON PLANNING PACKAGE**
Teacher training materials in conversion of written objectives to lesson plans

894 **EMPLEEN INGLES**
A series of 31 films designed to teach English to Spanish-speaking adults

896 **PERFORMANCE OBJECTIVES PACKAGE**
A product developed to provide teachers with a tool by which they can determine what their adult students want to learn

898 **BILINGUAL BALANCE TESTS**
A set of comprehensive tests to measure the Spanish and English language skills of students, grades 1-7, coming from homes where only Spanish is spoken

900 **BIDIALECTAL BALANCE TESTS**
A set of comprehensive tests to measure the language skills of students grades 1-6 coming from homes where standard English is not spoken

902 **SOBER-ESPANOL**
An objectives-based system to assess reading achievement in Spanish, for students in grades K-3

904 **BLACK DIALECTS AND READING**
A book for teachers of black children to improve the effectiveness of language and reading instruction

905 **DIALECTS AND DIALECT LEARNING**
A self-contained inservice program for elementary and secondary schoolteachers aimed toward teacher understanding of nonstandard dialects

907 **ANALYZING CHILDREN'S BOOKS WITH A CHICANO PERSPECTIVE (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A unit to prepare teachers of Chicano children ages 4-8 to foster the self- and community concept of the Chicano child

909 **SELECTING CHILDREN'S BOOKS WITH A BLACK PERSPECTIVE (PART OF THE FLEXIBLE LEARNING SYSTEM)**
A unit to prepare teachers of black children, K-4, to choose texts appropriate to the black experience

911 **CONTENT ANALYSIS OF TEXTBOOKS FOR BLACK STUDENTS, GRADES 1-3**
A self-instructional guide for teachers who wish to identify cultural bias in school materials

914 **LEARNING A STANDARD ENGLISH**
An individualized programed course for teachers who wish to individualize the teaching of standard English to nonstandard English speakers in grades K-14

EDUCATIONAL EQUITY: Multicultural/ Bilingual Education (Continued)

917 **TEACHING A STANDARD ENGLISH TO SPEAKERS OF OTHER DIALECTS**
A self-contained, 1-day workshop for English and language arts teachers

919 **TEACHING WRITING TO SPEAKERS OF NONSTANDARD DIALECTS**
An inservice or preservice course containing programs in a variety of self-correction and self-pacing formats

922 **ENGLISH AS A SECOND LANGUAGE PACKAGE**
A product designed to aid the teacher to relate the instruction to the specific needs of the students

924 **THINKING AND REASONING GAMES (PART OF THE THINKING AND REASONING PROGRAM)**
Three teacher training units which enable teachers to act as effective facilitators for children in an independent, game-oriented learning environment

927 **THE GAME CENTER (PART OF THE THINKING AND REASONING PROGRAM)**
A color film to encourage children in grades K-2 to cooperate in a game-learning environment

929 **PREPARING TEACHERS FOR MEXICAN AMERICAN CHILDREN**
A document to help teachers understand the learning problems of Mexican-American children

930 **PRACTICE-CENTERED TEACHER TRAINING: STANDARD ENGLISH FOR SPEAKERS OF NONSTANDARD DIALECTS**
A manual for training teachers of standard English to understand speakers of nonstandard dialects

932 **MULTIMEDIA TRAINING PACKAGE FOR SPANISH SPEAKING PARAPROFESSIONAL TEACHERS: "EL ARREGLO DE LA SALA DE CLASE PARA BUEN COMPORTAMIENTO"**
A multimedia training package for Spanish-speaking, low-income paraprofessional teachers of preschool children

935 **THE IMPLICATIONS OF BILINGUAL EDUCATION FOR DEVELOPING MULTICULTURAL SENSITIVITY THROUGH TEACHER EDUCATION**
An aid for teachers who are sensitive to the cultural differences of their pupils

936 **CONFRONTATION: HUMAN RELATIONS TRAINING UNIT**
A set of films to aid teachers in analyzing specific interpersonal race-related problems in their school

939 **TRANSCULTURAL COUNSELING: NEEDS, PROGRAMS, AND TECHNIQUES**
An analysis of literature concerning the counseling needs of minority groups

EDUCATIONAL EQUITY: Sex Fairness

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943 **AFFIRMATIVE ACTION: WOMEN'S RIGHTS ON CAMPUS, REPORT NO. 6**
An examination of laws governing affirmative action programs and sex discrimination on campus

944 **GIRLS AT 12 (PART OF THE ROLE OF WOMEN IN AMERICAN SOCIETY PROJECT)**
A film for grades 10-12 on the impact of sex role stereotyping on career choice

947 **PARENT-STUDENT HANDBOOK ON SEX BIAS AND STEREOTYPING: IMPLICATIONS FOR CAREER PLANS (A PRODUCT OF CPSS, THE CAREER PLANNING SUPPORT SYSTEM)**
A resource for parents of high school students on techniques for helping their children become aware of sex bias in the career world

949 **PROTOCOLS ON THE PROCESS OF CHANGE (SEX ROLE STEREOTYPING IN SCHOOLS)**
Two films to demonstrate how to bring about changes in stereotyped thinking in student career choice

952 **PROTOCOLS ON SEX ROLE STEREOTYPING IN SCHOOLS**
Three films to increase awareness of sex role stereotyping

955 **SEX ROLE DEVELOPMENT IN YOUNG CHILDREN: AN ABSTRACT BIBLIOGRAPHY**
A bibliography of materials in the ERIC system about recent research on sex role development in young children

956 **SEX ROLE AND PUPIL ROLE IN EARLY CHILDHOOD EDUCATION**
A paper on the interaction of sex role with pupil role in early childhood settings

957 **SOUNDS OF CHANGE: A REPORT ON TRAINING IN COUNSELING AND PROGRAMMING FOR WOMEN'S CAREER OPPORTUNITIES**
A report on a workshop for adult women planning to return to work

958 **WOMEN AND THE WORLD OF WORK (PRODUCT OF THE HOME/COMMUNITY-BASED CAREER EDUCATION MODEL III)**
A manual to help women in their career development

EVALUATION, MEASUREMENT, AND NEEDS ASSESSMENT

963 **OVERVIEW**

967 **CSE ELEMENTARY SCHOOL EVALUATION KIT: NEEDS ASSESSMENT**
The "consultant-in-a-box" for school personnel responsible for program evaluations

EVALUATION, MEASUREMENT, AND NEEDS ASSESSMENT (Continued)

970 **CSE ELEMENTARY SCHOOL FORMATIVE EVALUATION KIT**
A comprehensive unit including detailed instructions for each step and formation evaluation of a school program with specific learner objectives

972 **EVALUATION WORKSHOP I: AN ORIENTATION (EW-I)**
A set of highly structured training materials focusing on the major steps and components in the evaluation of educational programs

975 **EVALUATION WORKSHOP II: NEEDS ASSESSMENT (EW-II)**
A set of highly structured training materials focusing on the major steps and components of a needs assessment project

978 **CSE PRESCHOOL/KINDERGARTEN HIERARCHICAL OBJECTIVES CHARTS**
A set of charts outlining the goals and objectives of preschool and kindergarten education

980 **CSE ELEMENTARY SCHOOL HIERARCHICAL OBJECTIVES CHARTS**
A set of charts outlining 145 goals and objectives of elementary education

983 **CSE/RBS TEST EVALUATIONS: TEST OF HIGHER-ORDER COGNITIVE, AFFECTIVE, AND INTERPERSONAL SKILLS**
An evaluation of 2,610 scales measuring skills in the higher order cognitive, affective, and interpersonal areas

985 **CSE-ECRC PRESCHOOL/KINDERGARTEN TEST EVALUATIONS**
Evaluations of the most commonly used measures of school achievement

987 **CSE ELEMENTARY SCHOOL TEST EVALUATIONS**
Evaluations of standardized achievement tests in all elementary school subject areas

989 **CSE SECONDARY SCHOOL TEST EVALUATIONS**
A three-volume kit which aids school personnel in the selection of testing measurements relative to school program goals

991 **CSE ELEMENTARY SCHOOL PROGRAM PLANNING KIT**
Instructional planning materials for elementary school staff

994 **DEVELOPMENT, DISSEMINATION, AND EVALUATION (DD&E) ASSESSMENT BATTERY**
A model assessment system for competence-based professional training

997 **EVALUATION FOR PROGRAM IMPROVEMENT**
Training materials for school personnel concerned with providing educational opportunities for children

999 **PUPIL-PERCEIVED NEEDS ASSESSMENT PACKAGE**
A multimedia package to aid in the design and implementation of an assessment of school needs as perceived by pupils

1001 **PUPIL ASSESSMENT SYSTEM**
Instruments to assess six dimensions of elementary and junior high school student achievement, attitudinal, and behavioral development

1004 **HANDBOOK OF COMPREHENSIVE PLANNING IN SCHOOLS**
A handbook designed to assist administrators in collecting data on the results of the instructional process rather than to test students in the traditional sense

1006 **SCHOOL PLANNING, EVALUATION, AND COMMUNICATION SYSTEM (SPECS)**
A set of processes for collecting and analyzing data describing school system outcomes, processes, and costs

1008 **A SYSTEM FOR ASSESSING THE STAGES OF CONCERN OF INNOVATION USERS (THE S OF C DIMENSION OF THE CONCERNS-BASED ADOPTION MODEL [CBAM])**
An instrument to measure an individual's concern regarding innovations

1010 **A SYSTEM FOR ASSESSING THE LEVELS OF USE OF INNOVATION USERS (THE L OF U DIMENSION OF THE CONCERNS-BASED ADOPTION MODEL [CBAM])**
An instrument to determine an individual's ability to identify and utilize innovative techniques

1013 **TWO INSTRUMENTS FOR DIAGNOSING USER SYSTEM READINESS FOR INNOVATIVE ADOPTION**
Two checklists for use by educational change agents attempting to measure an organization's potential for change

1015 **AN ADMINISTRATOR'S HANDBOOK ON CURRICULUM EVALUATION**
A handbook to assist school district administrators in their efforts to evaluate pilot and ongoing programs of management direction with text, examples, and worksheets for a model school district evaluation program

1017 **COMMUNITY PERCEIVED NEEDS ASSESSMENT**
A step-by-step guide for administrators who wish to collect data about community concerns and perceptions of the school and individual school programs

1019 **EVALUATING SCHOOL PERSONNEL TODAY**
A review of the literature on evaluation stored in the ERIC system

1020 **MODEL TRAINING PROGRAM IN QUALITATIVE EDUCATIONAL EVALUATION**
An introduction to the basics of educational evaluation

1021 **SCHOOL DISTRICT PLANNING GUIDE FOR CHANGE**
A kit designed to lead a curriculum planning committee through the steps required to plan curriculum improvement

EVALUATION, MEASUREMENT, AND NEEDS ASSESSMENT (Continued)

1023 **A RADICAL AND REGRESSIVE SOLUTION TO THE PROBLEM OF EVALUATION**
A review of two major advances in preschool strategy, which proposes another evaluation approach

1024 **ACADEMIC AND SOCIAL BEHAVIOR ASSESSMENT KIT**
A system which allows relatively untrained personnel to systematically assess student performance

1027 **ASSESSMENT OF STUDENT ATTITUDES TOWARD LEARNING ENVIRONMENTS SCALE (ASA)**
An instrument measuring secondary students' attitudes toward a variety of traditional and nontraditional learning environments

1029 **COLORED BLOCKS TEST OF BASIC COGNITIVE LEVEL**
A language/culture free measure of Piagetian stages of development

1031 **A COMPUTER PROGRAM FOR ASSESSING "TRUE" STUDENT LEARNING GAINS AND THEIR RELATION TO TEACHER AND STUDENT CHARACTERISTICS**
A statistical package computing student gain scores and correlations between these scores and other pupil or teacher data

1033 **PSYCHOSOCIAL MATURITY (PSM) INVENTORY**
A self-report inventory measuring the psychological maturity of adolescents, ages 11-18

1036 **PURDUE SELF CONCEPT SCALE FOR PRIMARY GRADE CHILDREN**
A paper-and-pencil instrument for measuring self-esteem as related to physical, social, and academic skills

1037 **PURDUE SOCIAL ATTITUDE SCALES FOR PRIMARY GRADE CHILDREN**
A paper-and-pencil instrument for measuring attitudes towards peers, school, home, and community

1039 **RACIAL ATTITUDES SURVEY INSTRUMENT**
An instrument which measures student racial prejudices as a function of inschool interaction

1041 **CLASSROOM OBSERVATION SYSTEM**
A set of instruments measuring attitudes and interpersonal behavior of teachers and students

1044 **PEER EVALUATION TO IMPROVE TEACHING**
A text and workbook presenting innovative methods for evaluating teacher performance

1046 **THE TEACHER CONCERNS CHECKLIST (TCCL)**
A Likert Scale instrument which measures teacher motivations

1048 **TEACHER ASSESSMENT SYSTEM**
An assessment system using self-report instruments to give personalized feedback to each teacher

1050 **TEACHER AFFECTIVE SENSITIVITY SCALE (TASS)**
A validated simulation device measuring a teacher's ability to identify verbal and nonverbal emotions expressed by a student

1052 **ISSUES AND PROCEDURES IN THE DEVELOPMENT OF CRITERION REFERENCED TESTS: ERIC/TM REPORT 26**
A paper providing a nontechnical discussion of issues and procedures in the development and use of criterion-referenced tests

1053 **OPENING INSTITUTIONAL LEDGER BOOKS—A CHALLENGE TO EDUCATIONAL LEADERSHIP: ERIC/TM REPORT 28**
Methods of reporting test results to audiences lacking sophistication in measurement

1054 **PROCEDURES AND ISSUES IN THE MEASUREMENT OF ATTITUDES: ERIC/TM REPORT 30**
A guide to the design, construction, scoring, and interpretation of original scales to measure attitudes

1055 **A COLLECTION OF CRITERION REFERENCED TESTS: ERIC/TM REPORT 31**
An annotated bibliography of 21 criterion-referenced tests

1056 **EVALUATION DESIGNS FOR PRACTITIONERS: ERIC/TM REPORT 35**
Four evaluation designs used in school inservice settings

FINANCE, PRODUCTIVITY, AND MANAGEMENT

1059 **OVERVIEW**

1061 **COST-EFFECTIVENESS GUIDE FOR ADMINISTRATORS**
A handbook for a cost/benefit analysis of an alternative curriculum

1063 **COST EFFECTIVENESS TECHNIQUE**
A cost-effectiveness model for assessment of a basic elementary school skills curriculum

1065 **HANDBOOK OF ORGANIZATION DEVELOPMENT IN SCHOOLS**
Methods to plan and implement change in a school organization

1068 **HOW TO INVENTORY ORGANIZATIONAL NEEDS**
A discussion of implementation of school improvement through setting goals, selecting curriculum, and implementing and evaluating programs

1070 **PLANNING PROGRAM IMPLEMENTATION: A PROCESS GUIDE**
A handbook outlining major tasks to be considered when developing program implementation plans

1072 **ATTENDANCE MONITORING SYSTEM (AMS)**
A documented computer system to prepare daily and cumulative attendance reports

FINANCE, PRODUCTIVITY, AND MANAGEMENT (Continued)

1074 **SYSTEM APPROACH FOR EDUCATION (SAFE)**
A competency-based instructional system which provides materials for 36 hours of workshops in simulated problem solving through system analysis and synthesis

1076 **INDIVIDUALLY GUIDED EDUCATION (IGE)**
An alternative form of public schooling which focuses on student development through individualized curriculum and instruction

1080 **ARIOLE PLANNING KIT**
A self-instructional educational planning kit for practicing educators and students of education

1082 **DATA MANAGEMENT AND DECISION-MAKING**
Instructional materials designed to acquaint educational administrators with the applications of operations research to educational administration

1085 **RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY (REACT) COMPUTERS IN EDUCATION: A SURVEY COURSE I: COMPUTERS IN EDUCATION: A SURVEY**
A training course to introduce school personnel to the potential applications of computer technology to their field

1087 **RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY FOR TEACHERS (REACT) COURSE II: TEACHERS: COMPUTER-ORIENTED CURRICULUM**
A training course to provide teachers with specific examples of methods of integrating computer technology in business, mathematics, and science curriculums

1089 **RELEVANT EDUCATIONAL APPLICATIONS OF COMPUTER TECHNOLOGY FOR ADMINISTRATORS (REACT) COURSE III: COMPUTER APPLICATIONS FOR ADMINISTRATORS**
A training course to allow administrators to examine the benefits and limitations of a computerized data management system

1091 **DESIGNING INSTRUCTIONAL PROGRAMS**
A training package for team activities in workshops, college courses, and school settings

1093 **DIAGNOSTIC SURVEY FOR LEADERSHIP IMPROVEMENT (DSLI)**
A 52-item survey for assessing discrepancies between staff and student needs and organizational demands

1096 **ERNSTSPIEL TASK GROUP COMMUNICATIONS KIT**
An eight-segment kit for developing individual skills in communications and interpersonal relationships

1098 **INTERPERSONAL COMMUNICATIONS (IPC)**
A program package kit which focuses on the concepts and skills of interpersonal communications in the classroom, community, and one-to-one situations

1101 **INTERPERSONAL INFLUENCE**
A 20-unit training program designed to increase participant awareness of the consequences of personal communications style on the process of interpersonal influence

1104 **ORGANIZATION DEVELOPMENT: BUILDING HUMAN SYSTEMS IN SCHOOLS**
An introduction to organizational development theory and practice

1106 **ORGANIZATION DEVELOPMENT IN SCHOOLS (AN AUDIO SLIDE PRESENTATION)**
A slide show on how the school community can serve as a source of innovative programs in the schools

1107 **PROJECT MANAGEMENT BASIC PRINCIPLES**
A multimedia, self-instructional package to improve school-personnel-project-management techniques

1110 **PREPARING EDUCATIONAL TRAINING CONSULTANTS: SKILLS TRAINING (PETC-I)**
Two-week workshop to train participants in diagnosing individual and group needs in the process skills of goal setting, communicating, and decisionmaking

1113 **PREPARING EDUCATIONAL TRAINING CONSULTANTS: CONSULTING (PETC-II)**
The second part in a series of three instructional programs designed to introduce participants to comprehensive diagnostic and intervention models which facilitate instructional or organizational innovation

1116 **PREPARING EDUCATIONAL TRAINING CONSULTANTS: ORGANIZATIONAL DEVELOPMENT (PETC-III)**
An 8-month workshop and inservice training program designed to develop individual skills in designing and maintaining organization change

1119 **PROJECT MANAGEMENT EXECUTIVE ORIENTATION**
A multimedia training product to introduce top-level school administrators to the concepts and techniques of project management

1122 **PROPOSAL DEVELOPMENT**
An individualized package to train school administrators and teachers in the techniques of obtaining approval and financial support for educational activities

1124 **RURAL FUTURES DEVELOPMENT STRATEGY DESCRIPTIONS**
Four types of descriptions of strategy to help people in rural communities regain self-determination and local control

1127 **RURAL FUTURES DEVELOPMENT GUIDE FOR SUPPORT AGENCIES**
A guide for regional or State educational staff providing support for educational change in a rural setting

FINANCE, PRODUCTIVITY, AND MANAGEMENT (Continued)

1130 **RURAL FUTURES DEVELOPMENT GUIDE FOR SCHOOL BOARDS**
A handbook for school-board-member participation in educational problem solving in a rural community

1132 **RURAL FUTURES DEVELOPMENT GUIDE FOR SCHOOLS**
A handbook for community groups participating in planning and implementing educational improvements in a rural community

1135 **RURAL FUTURES DEVELOPMENT NOTEBOOK FOR SCHOOL-COMMUNITY GROUPS**
A handbook for those who work in educational problem solving in rural communities

1138 **RURAL FUTURES DEVELOPMENT GUIDE FOR TRAINING SCHOOL-COMMUNITY PROCESS FACILITATORS**
A guide for the trainers of external change agents who are to facilitate educational improvement in a rural community

1140 **RURAL FUTURES DEVELOPMENT MANUAL FOR SCHOOL-COMMUNITY PROCESS FACILITATORS**
Information, guidelines, and resources for those facilitating educational problem solving in rural communities

1143 **RESEARCH UTILIZING PROBLEM SOLVING (RUPS)**
A training package to develop problem-solving skills of administrators and teachers

1147 **SOCIAL CONFLICT AND NEGOTIATIVE PROBLEM SOLVING (NPS)**
A 25-hour series of structured experienced-based workshops to develop skills, personnel and organizational insights required for bargaining and negotiation

1150 **SWRL INSTRUCTIONAL DEVELOPMENT CONTROL AND MONITORING SYSTEM (IDCMS)**
A minicomputer and software system designed to facilitate research and development on teaching and learning

1152 **SWRL INSTRUCTIONAL MANAGEMENT SYSTEM (IMS-3)**
Computer software system, operation guides, and operational forms to allow school personnel and parents to monitor instructional programs

1154 **SWRL INSTRUCTIONAL PRODUCT SELECTION KIT**
Resources for use in conducting inservice training in the selection of effective instructional products

1156 **A TRAINING PACKAGE FOR DETERMINING INSTRUCTIONAL PURPOSES**
Materials for staff workshops in instructional planning and management

1159 **COMMUNITY SCHOOLS**
Research on community schools: administration, curriculum development, facilities, staff, and finance

1160 **DESIGNING SCHOOL ORGANIZATIONS: THEORY, RESEARCH RESULTS, AND APPROACHES**
A survey-feedback approach to the identification and solution of school problems

1162 **DEVELOPING OPEN EDUCATION IN AMERICA**
Community and school environment prerequisites for open learning

1163 **DIRECTORY OF ORGANIZATIONS AND PERSONNEL IN EDUCATIONAL MANAGEMENT**
A sourcebook of educational administration: the subject area and dissemination policy of the leading organizations and researchers

1164 **FREE/OPEN SCHOOLS**
Alternative, experimental, and traditional schools: a comparison

1165 **GUIDE TO THE DEVELOPMENT OF A REGIONAL CONSORTIUM OF STATE DEPARTMENTS OF EDUCATION**
A developmental history of the Appalachian Region Consortium

1166 **A GUIDE TO ORGANIZING SHORT-TERM STUDY ABROAD PROGRAMS**
Information on arrangements for study abroad for groups of high school and college students

1167 **THE IMPACT OF LEGAL DECISIONS ON THE FUTURE OF EDUCATION**
Court decisions affecting teaching and teacher education

1168 **PARENTAL AND COMMUNITY INVOLVEMENT IN EDUCATION AND TEACHER EDUCATION**
History, model programs, and benefits of parental and community involvement

1169 **STUDENTS' RIGHTS: A GUIDE TO THE RIGHTS OF CHILDREN, YOUTH, AND FUTURE TEACHERS**
Case histories of student rights to freedom of expression, search and seizure, dress, invasion of privacy, and discipline

1170 **PLAYGROUND FACILITIES AND EQUIPMENT**
A report on implications of major research findings on playground facilities and equipment

1171 **SOURCEBOOK OF TRAINING PRODUCTS IN INSTRUCTIONAL PLANNING AND MANAGEMENT**
A catalog of training products with a user's guide to product review and selection

1173 **STUDENT PRESS RIGHTS: STRUGGLES IN SCHOLASTIC JOURNALISM**
Court cases and decisions concerning student publications and underground newspapers

1174 **YEAR-ROUND SCHOOLS**
Parent, teacher, and taxpayer questions and answers on the topic of year-round school

GUIDANCE AND COUNSELING

1177 **OVERVIEW**

1179 **AN EXPERIMENTALIST APPROACH TO COUNSELING**
A discussion on the role of the counselor in contemporary society

1180 **BEHAVIOR MODIFICATION HANDBOOK FOR HELPING PROFESSIONALS**
A handbook of behavioral techniques useful to counselors

1181 **COUNSELING OLDER PERSONS: CAREERS, RETIREMENT, DYING**
A paper to help counselors work with the aging

1182 **DEVELOPING STUDENTS' POTENTIALS**
A publication for helping professionals to develop student potentials

1183 **AN ACCOUNTABILITY MODEL FOR COUNSELORS: ERIC/TM REPORT 27**
A paper describing accountability in counseling

1184 **NEW DESIGNS AND METHODS FOR DELIVERING HUMAN DEVELOPMENTAL SERVICE**
A resource document for those who are planning to initiate or update their own program.

1185 **PARAPROFESSIONALS IN HUMAN SERVICES**
A monograph dealing with the use of paraprofessionals in educational and mental health settings

1186 **PARENT EDUCATION AND ELEMENTARY COUNSELING**
A description of several model programs in parent counseling

1187 **WHAT'S HAPPENING IN COUNSELING IN U.S. FEDERAL PRISONS**
An overview of the current status of counseling in the Federal and State prison systems

1188 **IMPACT MAGAZINE**
A bimonthly magazine promoting change and innovation in counseling and related professions

1190 **SEARCHLIGHT**
Sixteen annotated bibliographies on subject areas of importance to counselors

INFORMATION UTILIZATION AND DISSEMINATION

1193 **OVERVIEW**

1195 **ANALYZING AND IMPROVING THE IMPLEMENTATION OF A LOCAL EDUCATION PROGRAM (COMPONENT OF A 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A self-instructional training unit providing a problem-solving model on improving the implementation of a local educational program

1197 **DIFFUSING EDUCATIONAL IMPROVEMENT PROGRAMS WITHIN A SCHOOL DISTRICT (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A training product presenting theory and strategies for spreading the adoption of an innovative program within a school district

1199 **DIFFUSION STRATEGY GUIDE**
A methodology for planning and managing the diffusion of innovations

1200 **THE EDUCATIONAL INFORMATION CONSULTANT (EIC) TRAINING PROGRAM**
A team-learning program which explores methods of communicating research and development information to the education practitioner

1203 **ENQUIRY AS AN EDUCATIONAL THEME (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A training program offering a model for inquiry and examining innovations in terms of the model

1205 **INDIVIDUALIZATION, MASTERY, AND STUDENT SELF-DIRECTION AS THEMES OF EDUCATIONAL REFORM, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A training product offering models for analysis of the three themes and examining innovations in terms of the model

1208 **INSTRUCTOR'S GUIDE TO TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS (A 10-UNIT TRAINING PROGRAM)**
Description of a 10-unit training program and how it can be used in planning and conducting instruction with educational leaders in different categories

1210 **PERSONAL/SOCIAL DEVELOPMENT AS AN EDUCATIONAL THEME, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A self-instructional training unit describing aspects of personal/social development and analyzing approaches to achieving these goals

1213 **PROMOTING CHANGE IN SCHOOLS, A DIFFUSION CASEBOOK**
Ten case studies of successful innovations

1214 **RELEVANCE AS AN EDUCATIONAL THEME, WITH RELATED INNOVATIONS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATION IMPROVEMENT PROGRAMS)**
A training program analyzing meanings of relevance and examining various approaches to achieving relevance in the school program

INFORMATION UTILIZATION AND DISSEMINATION (Continued)

1217 **SELECTING AN EDUCATIONAL IMPROVEMENT PROGRAM (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A self-instructional training unit providing a six-step model of the process of selecting an improvement program to meet local needs

1219 **TASK FLOW FOR DESIGNING AND CONDUCTING LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
A self-instructional training product presenting an 11-step task flow model for planning and conducting a local improvement program

1222 **THEORY AND STRATEGIES OF LOCAL EDUCATIONAL IMPROVEMENT (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
Conceptual models providing bases for selecting, designing, and conducting any kind of local school improvement program

1224 **TRAINING PROGRAM INTRODUCTION AND GENERAL STUDY PLAN GUIDE (COMPONENT OF 10-UNIT PROGRAM OF TRAINING FOR LEADERSHIP IN LOCAL EDUCATIONAL IMPROVEMENT PROGRAMS)**
Self-instructional training unit on types of local change programs and leadership roles in such programs

1227 **ALERT, A SOURCEBOOK OF ELEMENTARY CURRICULA, PROGRAMS, AND PROJECTS**
A selected sample of curriculums, training programs, model projects, and resources for use in elementary education

1228 **BEHAVIOR OF INNOVATIVE PERSONNEL**
A paper discussing characteristics of innovative educational personnel

1229 **COMMUNITY USE OF THE ERIC SYSTEM: INFORMATION PACKAGES**
A set of packages to familiarize community groups with the ERIC information system

1230 **CHANGE STRATEGIES AND TECHNIQUES FOR THE HELPER**
An overview of the process of planned change

1231 **ERIC: WHAT IT IS, HOW TO USE IT**
A kit for individual or group training in use of the ERIC system

1233 **THE EVALUATION OF EDUCATIONAL INFORMATION CENTERS: ERIC/TM REPORT 34**
An overview of strategies for assessing educational information centers

1234 **1974 DIRECTORY OF RESOURCES IN ADULT EDUCATION**
A compendium of adult education associations, periodicals, data bases, and data retrieval systems

1235 **OPTIONS AND PERSPECTIVES: A SOURCEBOOK OF INNOVATIVE FOREIGN LANGUAGE PROGRAMS IN ACTION, K-12**
A survey of 50 successful experiments in foreign language instruction

1237 **HOW TO CONDUCT A SEARCH THROUGH ERIC**
An introduction to ERIC resources, including Resources in Education, Current Index to Journals in Education, *and the ERIC* Thesaurus

1238 **LIBRARY AND REFERENCE SKILLS CURRICULUM**
A complete library program for students in grades 3-6

POSTSECONDARY EDUCATION

1243 **OVERVIEW**

1247 **STATE POSTSECONDARY EDUCATION PLANNING MODEL (SPEPM)**
A computerized State planning model to assess the impact of alternative financing plans on postsecondary education

1249 **AN EXAMINATION OF POSSIBLE STATEWIDE APPLICATIONS AND EXTENSIONS OF THE NCHEMS PROGRAM CLASSIFICATION STRUCTURE**
An outline of a State-level information structure incorporating the National Center for Higher Education Management Program Classification Structure

1251 **INFORMATION EXCHANGE PROCEDURES (IEP)**
A set of recommendations and guidelines for collecting, reorganizing, and displaying educational planning data

1253 **A REFERENCE GUIDE TO POSTSECONDARY EDUCATION DATA SOURCES**
A summary of publications, articles, and data bases containing data items used in the NCHEMS educational planning systems

1255 **POSTSECONDARY EDUCATION INSTITUTIONAL DATA USE MANUAL**
A guide for interpretation and use of institutional and student data

1256 **STATEWIDE MEASURES INVENTORY**
Information on statewide postsecondary education planning and management

1258 **POSTSECONDARY EDUCATION OUTCOMES MEASURES AND PROCEDURES MANUAL**
A manual which suggests the definitions and data-acquisition procedures necessary for collecting top-priority outcomes measures

1260 **PROGRAM MEASURES**
A system for organizing information about postsecondary education

POSTSECONDARY EDUCATION (Continued)

1262 **REVISION OF THE PROGRAM CLASSIFICATION STRUCTURE**
An update of the 1972 program classification guide providing a more easily implemented system for organizing information and postsecondary education

1263 **RESOURCE REQUIREMENTS PREDICTION MODEL (RRPM) 1.6**
An instructional cost simulation model for all types of postsecondary institutions

1266 **COSTING AND DATA MANAGEMENT SYSTEM**
A data management system which provides historical instructional cost studies

1268 **DATA ELEMENT DICTIONARY (DED)**
A second edition of a guide to assist institutions and agencies concerned with higher education in the identification, definition, and collection of data required for implementation of the NCHEMS systems

1270 **NCHEMS GLOSSARY**
A collection of basic terminology used in NCHEMS products

1271 **POSTSECONDARY EDUCATION ACADEMIC UNIT PLANNING MANUAL (AUPM)**
A technique to identify and organize information about academic unit functions and human and physical resources

1273 **FACULTY ACTIVITY ANALYSIS MANUALS (FAA)**
Techniques for collecting data to serve as a foundation for analyzing faculty activities and allocating salaries to instructional programs

1275 **STUDENT FLOW MODEL SFM-IA**
A tool for analyzing and predicting student flow between fields of study

1277 **ACCOUNTABILITY IN HIGHER EDUCATION, REPORT NO. 1**
A summary of trends in accountability and a bibliography of the accountability literature of the 1970's

1278 **COMMUNITY COLLEGES RESPOND TO ELDERS: A SOURCEBOOK FOR PROGRAM DEVELOPMENT**
A guide to developing and implementing educational programs for the elderly

1280 **COMPETENCY-BASED EDUCATIONAL PROGRAMS IN HIGHER EDUCATION**
Summary of status of developments in competency-based programs

1281 **COMPUTERIZED DATA SOURCES FOR HIGHER EDUCATION**
A summary of available data sources, definitions, and methods of access

1282 **A CONCEPTUAL REVIEW OF EXPERIENTIAL LEARNING IN HIGHER EDUCATION**
A critical review of the conceptual literature on experiential learning

1283 **CONCERNS OF HISTORICALLY AND DEVELOPING BLACK INSTITUTIONS: A BIBLIOGRAPHY**
A bibliography of ERIC materials on various aspects of black institutions

1284 **FACULTY WORKLOAD: FACTS, MYTHS, AND COMMENTARY**
A description of the state of the art of faculty workload measures

1285 **HIGHER EDUCATION AND THE STEADY STATE**
An examination of the response of postsecondary educational institutions to declining enrollments

1286 **INFORMATION CENTERS IN HIGHER EDUCATION**
An overview of resource centers which exchange noncomputerized data concerning postsecondary education

1287 **LIFETIME LEARNING: EXTENDING AVAILABILITY OF EDUCATION BEYOND COLLEGE AGE**
Recent developments, prospects, and potential problems of extending higher education beyond the traditional student age group level

1288 **THE PERSONALIZED SYSTEM OF INSTRUCTION: AN EDUCATIONAL ALTERNATIVE**
A detailed monograph tracing the history of the personalized system of instruction

1289 **STATE AID TO PRIVATE HIGHER EDUCATION, REPORT NO. 3**
A summary of proposed legislation for State support of independent postsecondary institutions

1290 **STRATEGIES FOR IMPROVING COLLEGE TEACHING, REPORT NO. 8**
Techniques to improve and reform college instruction

1291 **TIME SHORTENED DEGREES**
Historical background, benefits, and criticisms of degrees obtained over a shorter than usual period of time

1292 **URBAN INTERNSHIPS IN HIGHER EDUCATION, REPORT NO. 9**
A paper on the objectives and goals of internship programs

SOCIAL EDUCATION/ SOCIAL SCIENCE

1295 **OVERVIEW**

1301 **ENVIRONMENTAL EDUCATION CONCEPT LESSON CARDS**
An instructional program for students in K-6 organized around conservation education, natural environment, and outdoor recreation

1303 **DISCUSSING CONTROVERSIAL ISSUES**
A high school program to develop teachers' and students' skills in discussing controversial issues effectively in the classroom

1305 **LANGUAGE OF PERSONAL EXPERIENCE (LOPE)**
An instructional package to help children from ages 10 to 12 learn how to analyze significant elements of personal experience

SOCIAL EDUCATION (Continued)

1307 **PASS IT ON, I**
A multimedia product to increase opportunities for children ages 5-7 to grow in self-confidence

1310 **PASS IT ON, II (PART OF THE CHILDREN'S FOLKLORE PROGRAM)**
A multimedia product to increase opportunities for children ages 6-8 to grow in self-confidence

1313 **FROM CHILD TO CHILD (PART OF THE CHILDREN'S FOLKLORE PROGRAM)**
A motivational overview used to familiarize the viewer with the importance of play to the learning of young children

1315 **RESPONSIVE EDUCATION PROGRAM**
A program for grades K-3 meant to strengthen educational experiences by responding to the uniqueness of learners

1318 **SOCIAL ENCOUNTER AND RESEARCH CURRICULUM FOR HUMANIZATION (SEARCH)**
An individualized, interdisciplinary program of social education for grades K-3

1322 **SOCIAL EDUCATION, YEAR 1**
A multimedia instructional package to introduce social concepts about the family to 1st graders

1325 **SOCIAL EDUCATION, YEAR 2**
A package for 2d graders to develop selected concepts from the social sciences that relate to families in a community

1328 **SOCIAL EDUCATION, YEAR 3**
An introduction to basic relationships among lifestyles, environments, and traditions for 3d graders

1331 **RELEVANT EXPLORATIONS IN ACTIVE LEARNING (REAL) SETS I AND II**
A set of resource materials designed to help people better understand themselves and their potentials

1334 **PEOPLE AND PROBLEMS**
A film created for teachers to stimulate thought and discussion on developing problem-solving skills of students

1336 **SOCIAL DEVELOPMENT AND BEHAVIOR: AN ABSTRACT BIBLIOGRAPHY**
An annotated bibliography referring to children's peer relationships, interpersonal competence, social attitudes, and sociometric techniques

1337 **A CRITICAL ANALYSIS OF VALUES EDUCATION RESOURCES**
A paper to aid in the selection of values education materials

1338 **EDUCATING PRISONERS FOR SOCIALLY CONSTRUCTIVE ROLES**
A document concerned with the prevention of juvenile delinquency, and the education and certification of teachers of inmates

1339 **PREPARING SCHOOL PERSONNEL RELATIVE TO VALUES: A LOOK AT MORAL EDUCATION IN THE SCHOOLS**
A clarification of the development of moral judgment

1340 **PREPARING TEACHERS, STUDENTS AND CITIZENS TO DEAL CONSTRUCTIVELY WITH THE PROBLEMS AND POTENTIALITIES OF AGING**
A monograph to understand the physical and psychological aspects of aging

1341 **SOCIAL DEVELOPMENT IN YOUNG CHILDREN: A REPORT FOR TEACHERS**
A review of the current psychological research on social development in children ages 3-8

1343 **SOCIAL ORGANIZATION OF THE HIGH SCHOOL**
Training materials to help educational administrators and teachers look at educational encounters in terms of social action organization

1346 **VALUES EDUCATION: APPROACHES AND MATERIALS**
A paper to help social studies educators organize, comprehend, and choose values education materials appropriate to their needs

SOCIAL SCIENCE

1347 **SOCIAL PSYCHOLOGY: A RESOURCE FOR ELEMENTARY AND SECONDARY EDUCATORS**
A volume which describes 10 areas of educational practice for applying social-psychological resources

1348 **AMERICAN GOVERNMENT INFORMATION UNIT (AGIU)/(CURRICULUM ALTERNATIVES FOR SECONDARY SCHOOLS)**
A review and comparison of nine high school social studies programs

1350 **LEARNING WITH GAMES: AN ANALYSIS OF SOCIAL STUDIES EDUCATIONAL GAMES AND SIMULATIONS**
A book which describes and analyzes games and simulations suitable for children in grades K-12

1351 **BRINGING ABOUT CHANGE IN SOCIAL STUDIES EDUCATION**
A publication which addresses itself to the unique problems of diffusion, adoption, and change in social studies

1352 **COPING WITH COMMUNITY CONTROVERSY: GUIDELINES FOR INTRODUCING NEW SOCIAL STUDIES PROGRAMS**
General guidelines and introduction to new social studies programs

1353 **18, 19, 20: WILL THEY VOTE?**
A document containing suggestions and resources for preparing and motivating new young voters

1354 **GEOGRAPHY IN ELEMENTARY AND SECONDARY EDUCATION: TRADITION TO OPPORTUNITY**
A paper on the precollege teaching of the geography of the United States, from 1800 to the present

SOCIAL SCIENCE (Continued)

1355 **GLOBAL DIMENSIONS IN THE NEW SOCIAL STUDIES**
A survey which identifies a number of materials and guides that contain components useful for global education

1356 **GUIDELINES FOR USING A SOCIAL SIMULATION/GAMES**
Suggestions which provide analytical and critical information on the use of simulation/games in social studies classrooms

1357 **PREPARING TO TEACH POLITICAL SCIENCE: SOURCES AND APPROACHES**
A monograph listing resources and instructional methods for secondary teachers of political science

1358 **PROFILES OF PROMISE (POPs)**
A set of descriptive brochures that highlight innovative social studies programs and practices

1360 **TEACHING AMERICAN HISTORY: SOURCES AND APPROACHES**
A paper to help social studies teachers redesign American history courses to incorporate new teaching processes and approaches

1361 **TEACHING PSYCHOLOGY IN SECONDARY SCHOOLS**
A paper which examines the history and growth of precollege psychology

1362 **TIPS FOR TEACHING ABOUT THE BICENTENNIAL IN THE SOCIAL STUDIES**
A paper which suggests some creative classroom approaches and materials easily implemented by social studies teachers

1363 **TIPS FOR TEACHING ABOUT ETHNIC HERITAGE IN PRE-COLLEGE SOCIAL STUDIES**
A paper to aid precollege teachers who are teaching or plan to teach ethnic studies

1364 **TIPS FOR TEACHING PRE-COLLEGE SOCIOLOGY**
A document which provides teachers of grades 7-12 with suggestions for teaching sociology

1365 **TRENDS AND RESOURCES IN PRE-COLLEGE TEACHING OF ANTHROPOLOGY**
A paper which traces the growth in the importance of anthropology from the Second World War to the present time

TEACHER EDUCATION

1369 **OVERVIEW**

1373 **CLASSROOM AND INSTRUCTIONAL MANAGEMENT PROGRAM (CLAIM)**
Inservice teacher training program to assist teachers in reducing the frequency of behavior problems and increase the quality of academic work

1376 **COOPERATIVE URBAN TEACHER EDUCATION PROGRAM (CUTE)**
Preservice teacher education program to prepare teachers for inner-city schools

1379 **CROSS-AGE PEER HELP**
Two-day workshop to train teams of school personnel to set up a cross-age tutoring program

1381 **INTERACTIONAL ANALYSIS**
Program focusing on the three phases of interaction analysis instruction: tallying, analysis, and interpretation and usage

1384 **INTERACTION ANALYSIS, A MINICOURSE**
Training course for elementary and secondary teachers using microteaching to demonstrate the special skills of verbal communication

1386 **INTERDISCIPLINARY FACULTY TEAMING: A WORKSHOP**
Series of activities to encourage development of teams of members from different facets of the teacher education faculty

1388 **MINICOURSE 1: EFFECTIVE QUESTIONING—ELEMENTARY LEVEL**
A microteaching program to train teachers to ask more effective questions in class discussions

1390 **MINICOURSE 8: ORGANIZING INDEPENDENT LEARNING—PRIMARY LEVEL**
A self-instructional microteaching program to help teachers meet individual learning needs in grades K-3

1393 **MINICOURSE 10: ROLE PLAYING IN THE CLASSROOM**
A microteaching approach to help teachers plan student role-playing activities for grades 4-12

1395 **MINICOURSE 15: ORGANIZING INDEPENDENT LEARNING—INTERMEDIATE LEVEL**
A self-contained microteaching program to train teachers to plan and use independent study activities in grades 4-8

1397 **MINICOURSE 23: CLASSROOM MANAGEMENT THROUGH POSITIVE REINFORCEMENT**
A microteaching approach to introduce teachers of grades 1-6 to basics of reinforcement theory

1399 **MODULES AND THEIR ROLE IN PERSONALIZED PROGRAMS: A WORKSHOP (MTRIPP)**
Two-day workshop to introduce educators to competency-based teacher education

1401 **SELECTING COMPUTER INSTRUCTIONAL MATERIALS**
Materials to provide elementary and secondary teachers with an introduction to the basics of using computer hardware for computer-enhanced instruction

1403 **SETTING UP THE CLASSROOM (PART OF THE CONCEPTS AND LANGUAGE COMPONENT)**
Training manual presenting guidelines for kindergarten teachers in developing a constructive classroom atmosphere

TEACHER EDUCATION (Continued)

1405 **SYSTEMATIC AND OBJECTIVE ANALYSIS OF INSTRUCTION (SOAI)**
Teacher instruction in self-analysis and analysis of the teaching skills of others

1408 **TEAMS-GAMES-TOURNAMENT (TGT) INSTRUCTIONAL PROCESS CURRICULUM UNITS**
An instructional method of using group competition among groups of students having equal ability

1412 **TRAINING MATERIALS FOR THE PERSONAL ASSESSMENT FEEDBACK SYSTEM (PART OF THE COMPREHENSIVE ASSESSMENT SYSTEM (COMPASS) DEVELOPED FOR THE PERSONALIZED TEACHER EDUCATION PROGRAM (PTEP)**
Technique-training materials for counseling psychologists in teacher education programs to train others in personal assessment feedback counseling.

1416 **TRAINING MATERIALS FOR THE PERSONALIZED VIDEOTAPE FEEDBACK SYSTEM**
Materials to help teacher training staff personalize and increase the impact of the feedback given to students

1419 **ASSESSING AND INFLUENCING BEHAVIOR: A SELF-INSTRUCTIONAL TEACHER TRAINING PROGRAM**
A self-instructional program to train teachers to measure and change student behavior

1421 **DESIGN AND DEVELOPMENT OF CURRICULAR MATERIALS**
A course to teach methods and techniques for designing and implementing individualized curriculum materials

1424 **INDIVIDUALLY GUIDED MOTIVATION (IGM) (PART OF THE INDIVIDUALLY GUIDED MOTIVATION SYSTEM)**
A system to enable teachers to relate instruction to specific curriculum areas and attain motivational objectives

1428 **PREPARING AND USING SELF-TEACHING UNITS FOR FOREIGN LANGUAGES**
Self-teaching units to guide the teacher's choice in learning medium and evaluation procedures for teaching foreign languages

1429 **THE USE OF LEARNING PRINCIPLES IN INSTRUCTION**
Textbook on the design of lessons and curriculum for graduate students and curriculum designers

1432 **ACCREDITATION PROBLEMS AND THE PROMISE OF PBTE**
A paper on the relationship between the accreditation of teacher education institutions and performance-based teacher education

1433 **ALTERNATIVES FOR SCHOOLS OF EDUCATION CONFRONTED WITH EDUCATION ENROLLMENT AND REVENUE REDUCTIONS**
A review of teacher supply and demand and its implications for teacher education institutions

1434 **BEGINNING TEACHERS IN THE INNER CITY: A STUDY OF THE LITERATURE ON THEIR PROBLEMS AND SOME POSSIBLE SOLUTIONS**
A review of the literature of problems of beginning teachers working in the inner city

1435 **THE CAMPUS LABORATORY SCHOOL: PHOENIX OR DODO BIRD**
A discussion of the history, purpose, and future of campus schools

1436 **CLASSROOM OBSERVATION SYSTEMS IN PREPARING SCHOOL PERSONNEL**
A state-of-the-art and 42-item bibliography on classroom observation systems in preparing school personnel

1437 **COMPENSATORY EDUCATION: IMPLICATIONS FOR TEACHER EDUCATION**
A paper providing an analysis of development and teacher implications of compensatory education

1438 **COMPETENCY-BASED EDUCATION: THE STATE OF THE SCENE**
An outline of the competency-based education movement in the United States

1439 **COMPREHENSIVE PROPOSALS FOR TEACHER EDUCATION: A CONCISE GUIDE DERIVED FROM DONALD R. CRUICKSHANK'S STUDY OF PROPOSALS FOR SECOND-PHASE COMPREHENSIVE ELEMENTARY TEACHER EDUCATION MODELS PROJECT**
A review of applicants for phase 2 of the program to determine their general characteristics and their reactions to the program

1440 **CONCEPTS OF TEACHER CENTERS**
Review of the literature on problems of designing a teacher center

1441 **EFFECTIVE OBSERVATION OF EDUCATORS**
A discussion of how teachers' value systems can determine their interpretations of children's behavior

1442 **EXPLORING TEACHERS' CENTERS**
Descriptions of centers that offer inservice training or advisory services to elementary schoolteachers

1443 **FIELD-BASED TEACHER EDUCATION AND K-12 PERSONNEL RESPONSIBILITIES IN TEACHER EDUCATION: A REVIEW**
An examination of the implications of field-based teacher education

1444 **FLEXIBILITY IN PROGRAM PLANNING AND NCATE STANDARDS**
A discussion of flexibility as it is viewed by the standards of the National Council for Accreditation of Teacher Education

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